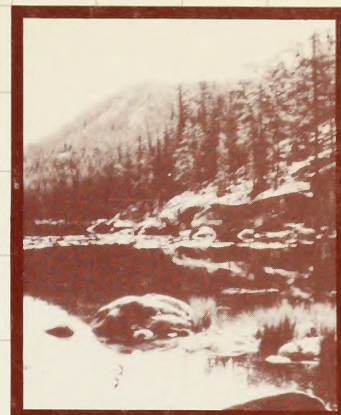
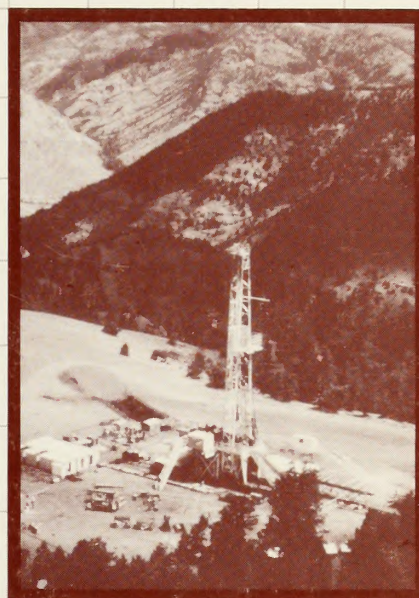




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the **BLM IN WYOMING**



A Report to the Public

1985

The photographs on the cover depict several of the BLM programs that received increased attention in fiscal year 1985.

-Congress appropriated \$16.7 million to remove excess wild horses and burros from the public rangelands in the west.

-Thirty-seven wildfires burned 6,591 acres of public land in Wyoming during this year's fire season.

-Scab Creek wilderness study area in Wyoming was recommended this year by the President to be designated as wilderness.

-Surveyors nationwide celebrated the bicentennial of the cadastral survey system.

-The first airmobile drilling operation in the state of Wyoming was done on a wildcat well in the North Fork drainage of the Shoshone River.

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**BLM IN WYOMING
A REPORT TO THE PUBLIC
Fiscal Year 1985**

**U.S. Department of the Interior
Bureau of Land Management
Wyoming State Office**

January 1986

Copies may be obtained from any
Bureau of Land Management Office in Wyoming

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A Letter to the Public. . .

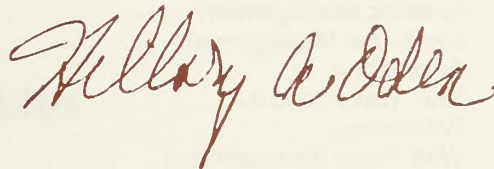
The responsibility for managing the public lands in today's society is an exciting challenge. With the diversity of activity on and interest in public land management, it is important that Wyoming's citizens become involved with land management issues and responsibilities.

BLM programs cover a wide spectrum of uses and activities—from recreation to minerals, grazing to watershed management, and forestry to cultural resources. As custodian of 17.8 million acres of public lands in Wyoming and Nebraska, and another 11.7 million acres of federal reserved minerals in the two states, we are attempting to meet the issues, challenges, and responsibilities of today and tomorrow.

This year's annual report can help you to become familiar with the activities and uses on your public lands. It describes the organizational functions and programs in the state, highlighting some of the past fiscal year's accomplishments. BLM's fiscal year 1985 ran from October 1, 1984, through September 30, 1985.

We hope this report will help you to understand us a little better, and in that understanding, help us to do a better job managing your public lands. We welcome your interest and involvement and look forward to another progressive year.

Sincerely,

A handwritten signature in dark ink, reading "Hillary A. Oden". The signature is fluid and cursive, with the first name "Hillary" being more prominent and the last name "Oden" following in a similar style.

Hillary A. Oden
Wyoming State Director

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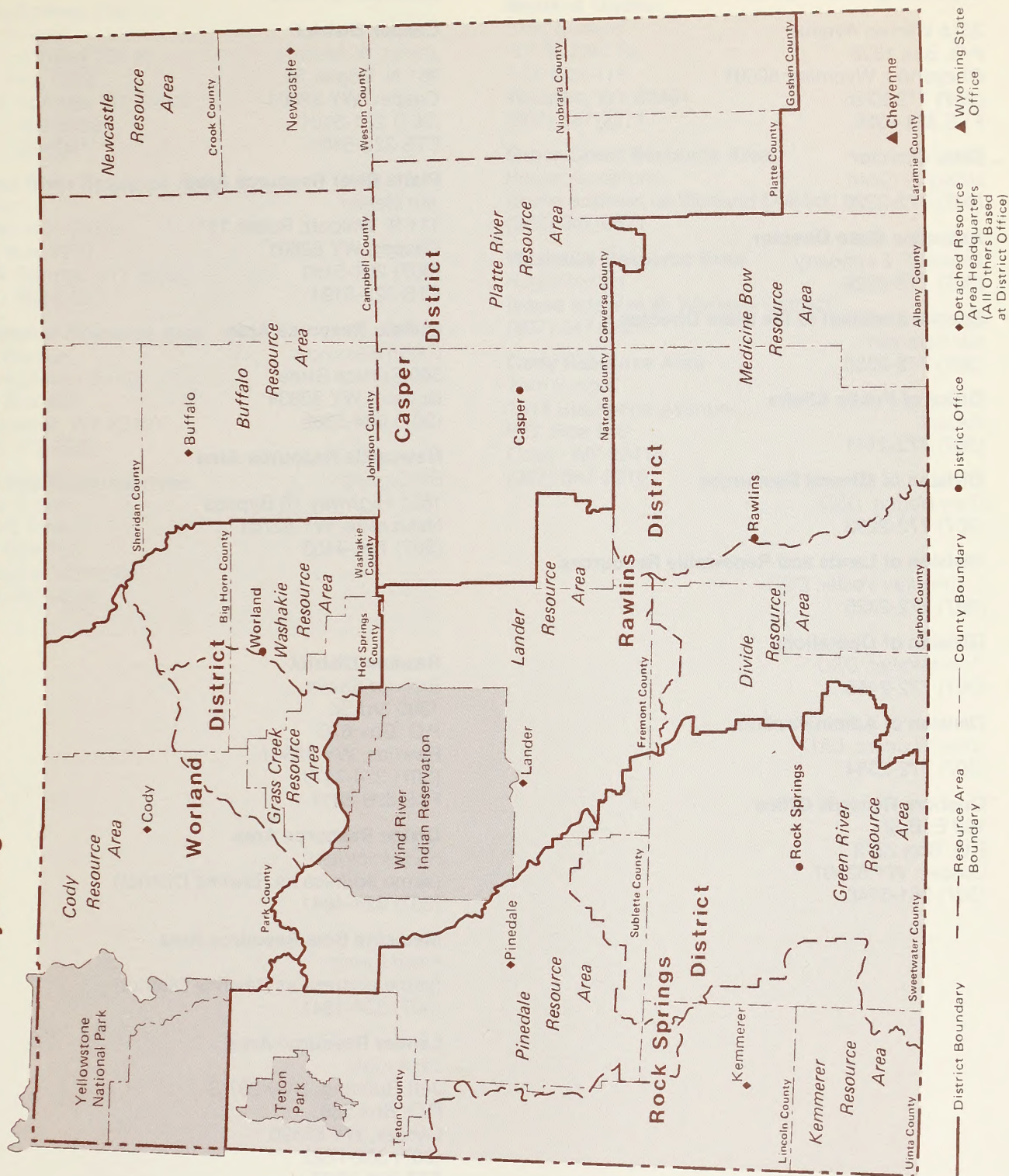
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Wyoming BLM District and Resource Area Boundaries



Wyoming BLM Directory

Wyoming State Office

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P.O. Box 1828
Cheyenne, Wyoming 82001
(307) 772-2326
FTS 328-2326

State Director

Hillary A. Oden
(307) 772-2326

Associate State Director

William F. Eikenberry
(307) 772-2326

Special Assistant to the State Director

Kai Petersen
(307) 772-2050

Office of Public Affairs

Vacant
(307) 772-2111

Division of Mineral Resources

Gary Horton, DSD
(307) 772-2293

Division of Lands and Renewable Resources

L. Christian Vosler, DSD
(307) 772-2425

Division of Operations

David Walter, DSD
(307) 772-2455

Division of Administration

Gilbert Lucero, DSD
(307) 772-2354

Onshore Records Office

100 E. B St.
P.O. Box 2373
Casper, WY 82601
(307) 261-5746

District Offices

Casper District

James W. Monroe
951 N. Poplar St.
Casper, WY 82601
(307) 261-5101
FTS 328-5101

Platte River Resource Area

Jim Melton
111 S. Wolcott, Room 111
Casper, WY 82601
(307) 261-5191
FTS 328-5191

Buffalo Resource Area

Glenn Bessinger
300 Spruce Street
Buffalo, WY 82834
(307) 684-5586

Newcastle Resource Area

Bill Daniels
1501 Highway 16 Bypass
Newcastle, WY 82701
(307) 746-4453

Rawlins District

Richard Bastin
1300 3rd St.
P.O. Box 670
Rawlins, WY 82301
(307) 324-7171
FTS 328-3011

Divide Resource Area

Bud Holbrook
(same address as Rawlins District)
(307) 324-4841

Medicine Bow Resource Area

Floyd Ewing
(same address as Rawlins District)
(307) 324-4841

Lander Resource Area

Jack Kelly
Jett Building, Hwy 287 S.
P.O. Box 589
Lander, WY 82520
(307) 332-7822
FTS 328-3307

Rock Springs District*Don Sweep*

U.S. Highway 191 N.

P.O. Box 1869

Rock Springs, WY 82902

(307) 382-5350

FTS 328-6011

Green River Resource Area*Vacant*

79 Winston Drive

P.O. Box 1170

Rock Springs, WY 82902

(307) 362-6422

Kemmerer Resource Area*Ron Wenker*

415 Highway 30 N.

P.O. Box 632

Kemmerer, WY 83101

(307) 877-3933

Pinedale Resource Area*Delon Potter*

431 W. Pine St.

P.O. Box 768

Pinedale, WY 82941

(307) 367-4358

Worland District*Chet Conard*

101 S. 23rd St.

P.O. Box 119

Worland, WY 82401

(307) 347-9871

Grass Creek Resource Area*Phyllis Roseberry*

(same address as Worland District)

(307) 347-9871

Washakie Resource Area*Roger Inman*

(same address as Worland District)

(307) 347-9871

Cody Resource Area*Tom Enright*

1417 Stampede Avenue

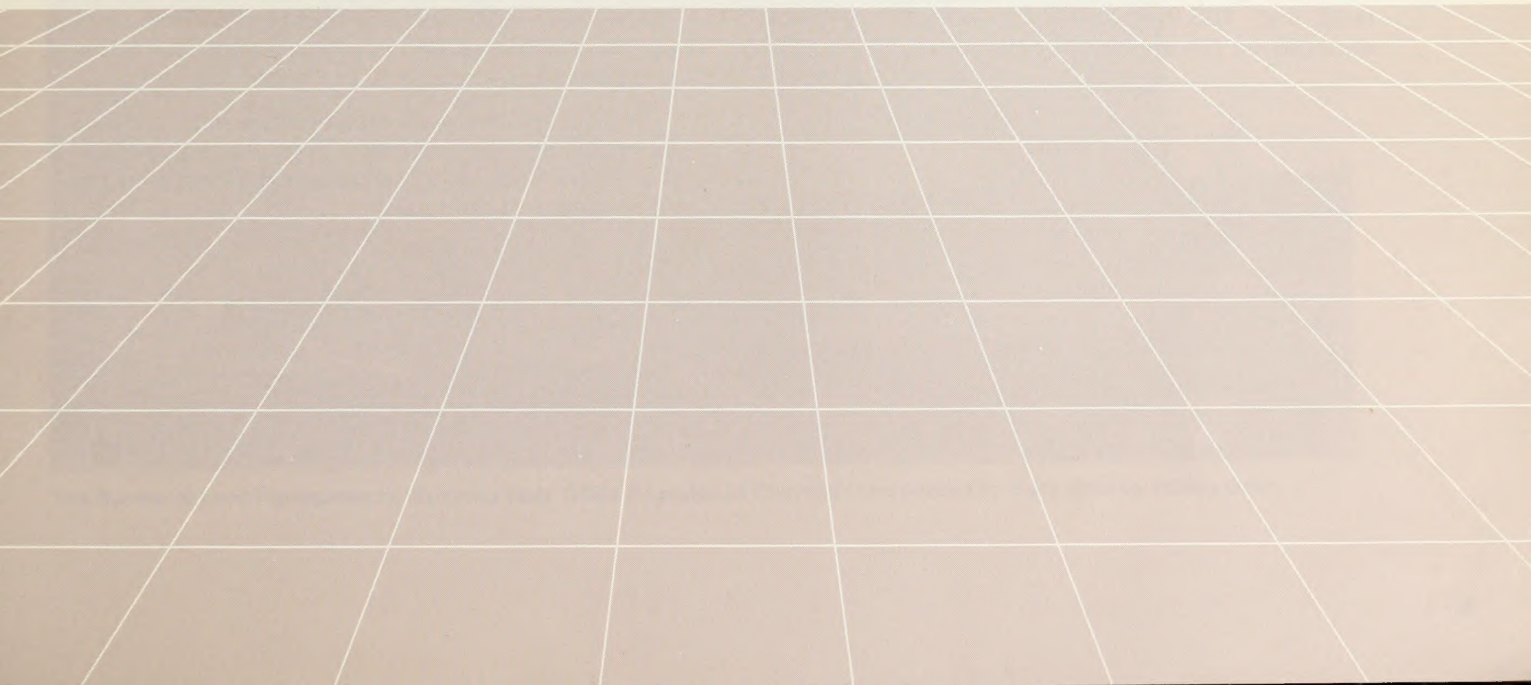
P.O. Box 518

Cody, WY 82414

(307) 587-2216



Overview



BLM Responsibilities

The primary responsibility of the Bureau of Land Management (BLM) is the protection, as well as the development and use, of our public lands and resources. The Federal Land Policy and Management Act (FLPMA) of 1976 directs BLM to manage the public lands in a manner that will do the following:

- Protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values;

- where appropriate, preserve and protect certain public lands in their natural condition;

- provide for outdoor recreation and human occupancy and use; and

- recognize the Nation's needs for domestic sources of minerals, food, timber and fiber from the public lands.

Nationwide, the BLM is responsible for the total management of about 300 million acres of public lands and for the minerals management of 71.5 million acres of acquired lands, along with the minerals management of 204 Indian Reservations in the West and Alaska, with scattered parcels located in other states.

BLM in Wyoming manages 17.8 million acres of public lands and minerals, another half million acres for other federal agencies, 11.6 million acres of public minerals under private surface. The BLM in Wyoming also has mineral responsibilities for 12 million acres of public lands owned by other federal agencies and for 600,000 acres of acquired lands and 483,000 acres of Indian lands. BLM's total responsibility involves about two-thirds of the land area of Wyoming. The BLM Casper District also manages approximately 8,528 acres of public land and 106,000 acres of federal reserved minerals on private lands in Nebraska.

Organizational Structure

BLM's basic organization consists of a headquarters in Washington, D.C., a service center in Denver, Colorado, and an interagency fire center in Boise, Idaho, all of which have bureauwide support responsibilities. The field organization includes 12 state offices, 55 district offices, and about 150 resource area offices.

The Washington, D.C., headquarters office develops and/or translates executive, legislative and judicial policies and procedures for programs under BLM administration and supports secretarial officials in coordinating these programs with other federal agencies and with state and local governments.

The Wyoming State Office of the BLM is located in Cheyenne and headed by State Director Hillary A. Oden. The organization is divided into four divisions: minerals, lands and renewable resources, operations, and administration (see the organization chart on page 8). The State Office is responsible for the administration of all public land and resource programs within Wyoming, as well as those in Nebraska. These responsibilities include planning, developing, and managing renewable and nonrenewable resource programs and maintaining relations with the public and with a variety of organizations.

Wyoming is divided into four geographic areas that are administered by BLM district offices in Casper, Rawlins, Worland, and Rock Springs (see the organization chart on page 9). The districts are the basic field component of BLM. Each is headed by a district manager. District responsibilities include developing and carrying out resource management work programs.

Each district is subdivided into three resource areas. The twelve resource areas in Wyoming have the responsibility for day-to-day resource management activities and implementation of on-the-ground actions for use of the public lands.

District and resource area boundaries and office locations are shown on the map on page 1. BLM managers and office addresses are listed in the BLM directory on page 2.

Interchange

In January 1985, the BLM and the Forest Service (FS) announced a proposal to interchange lands and minerals responsibilities between the two agencies to enhance public service, improve management efficiency of the natural resources, and reduce agency costs. In Wyoming, public hearings were held in Casper, Sheridan, and Rocks Springs. Informal meetings were held statewide with local governments, special interest groups, congressional staffs, and the general public. From information gained from these meetings, a detailed implementation guide was developed for Wyoming, as well as for other BLM and FS states affected by the proposal. The guide outlines the specifics of the proposal.

This information was available for a 30-day formal comment period beginning in early June. The proposals in Wyoming received 348 responses—more than any other state. Nationwide, the entire proposal received 2,350 responses. All the responses were analyzed and were used in preparation of a final interchange proposal which is expected to be presented to Congress for consideration.

Public Affairs

The public affairs office provides assistance to the state director, district managers, and the public through its public information, public involvement, and cooperative relations programs. Major activities performed by the Office of Public Affairs are as follows:

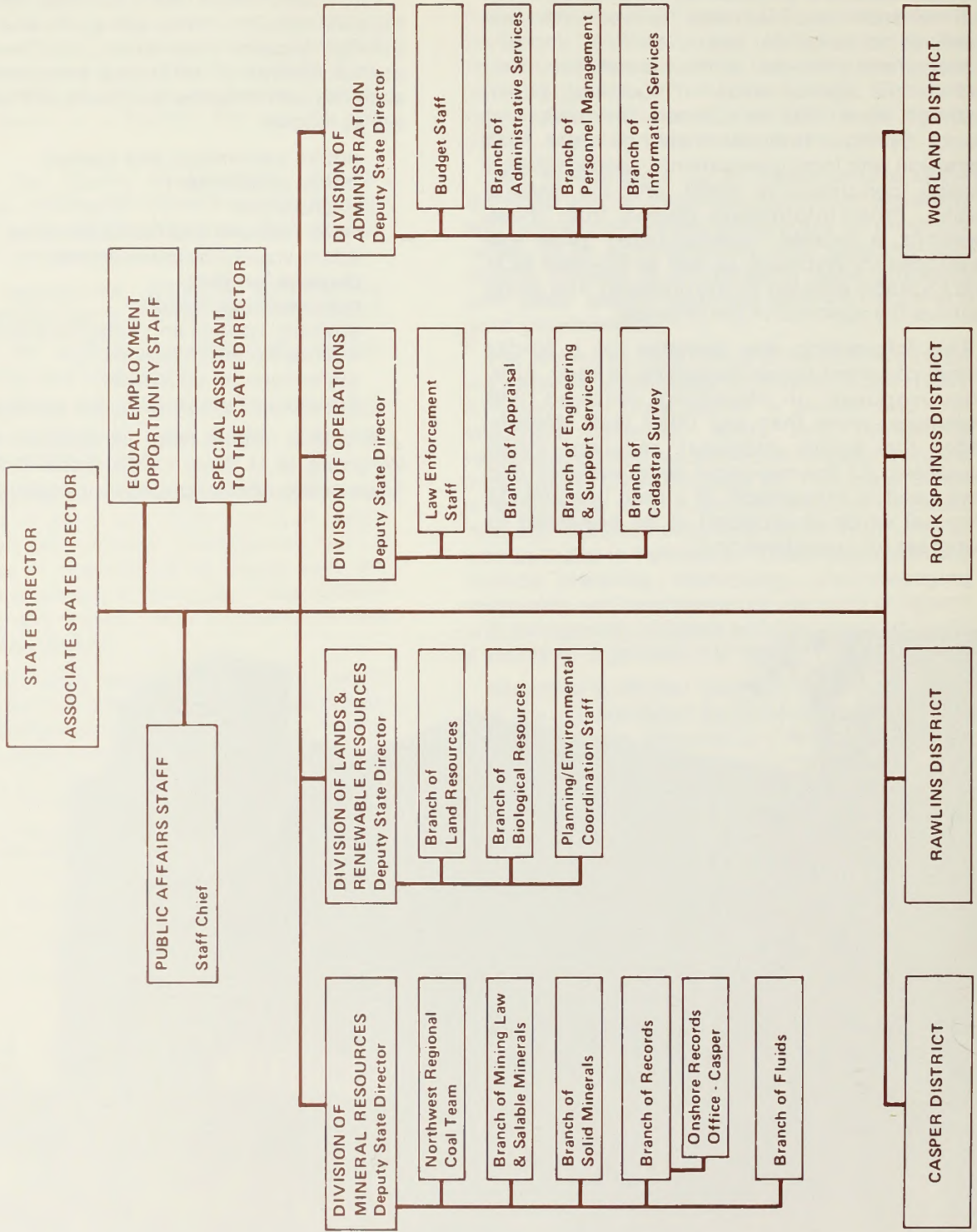
- public information and contact
- public involvement
- publications
- news releases and media contacts
- audio-visual communications
- displays/exhibits
- congressional liaison
- advisory council and board coordination
- internal communications
- environmental education
- Freedom of Information Act matters

A public affairs staff is maintained in the Wyoming BLM State Office. Each district office has a public affairs specialist or contact.

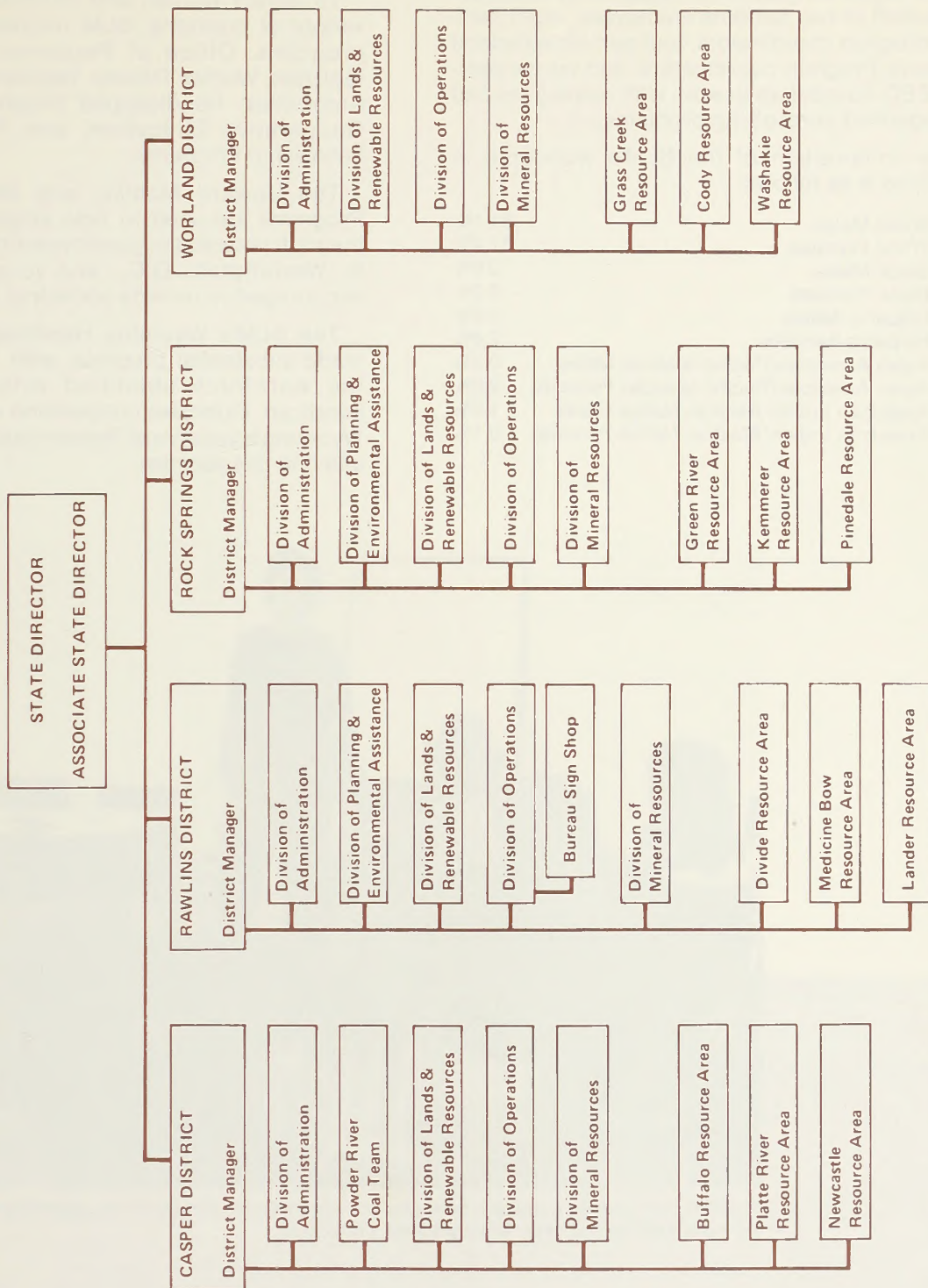


The Bureau of Land Management's Wyoming State Office is located in Cheyenne and headed by State Director Hillary Oden.

BLM State Office Organization Chart



BLM District Office Organization Chart



Equal Employment Opportunity

The Equal Employment Opportunity program has a staff of two full-time employees, eight part-time program coordinators, four part-time Federal Women's Program coordinators, and twelve part-time EEO counselors to work with employees and management in resolving problems.

The composition of the BLM's workforce in Wyoming is as follows:

White Males	61.1%
White Females	31.4%
Black Males	0.6%
Black Females	0.7%
Hispanic Males	1.9%
Hispanic Females	2.4%
Asian American/Pacific Islander Males	0.3%
Asian American/Pacific Islander Females	0.6%
American Indian/Alaskan Native Males	1.0%
American Indian/Alaskan Native Females	0.1%

In compliance with the 1964 Civil Rights Act, BLM is striving for a workforce that is truly representative of Wyoming's population.

To attract women and minorities into a wide variety of positions, BLM utilizes various hiring programs: Office of Personnel Management registers, Worker Trainee, Veterans Readjustment Authorities, Handicapped Program Authorities, Cooperative Education, and Federal Junior Fellowship Programs.

The Upward Mobility and Merit Promotion Programs are used to help employees to reach their full potential in government careers. Mobility to Washington, D.C., and to other states is encouraged to provide additional experience.

The BLM's Wyoming Handicap Program has made substantial progress, with 12.5 percent of the workforce identified with a reportable handicap. Extensive cooperation with the state of Wyoming's Vocational Rehabilitation Program has aided in this success.



The EEO staff provides training to managers and supervisors in personnel management practices to promote the equal employment opportunity program within BLM.

Administration



Introduction

Administrative responsibilities and support are primarily related to the following four function areas: budget, personnel management, administrative services, and information services. In the BLM Wyoming State Office, each of these functional areas is represented by a staff or branch in the Division of Administration. The districts usually have similar responsibilities but are not substructured to the same degree. Generally, districts have one or more individuals assigned to specific phases of administrative functions.

Budget responsibilities include current year budget/program coordination and monitoring, fiscal management, and future year budget/program development. In addition, the budget staff provides management analysis expertise and coordinates audits and evaluations.

Employee relations, position classification, training, personnel staffing, and performance appraisal constitute the historical types of personnel functions that administration oversees. Other nontypical areas of responsibility include incentive awards, privacy act determinations, organization development, discipline, and adverse actions.

The administrative services function includes property management, directives and paperwork, space needs and allocations, vehicles, and word processing. Other responsibilities under office services are printing, contracting, procurement, central files, and the library. The safety officer is located in this branch at the State Office level.

Information Services coordinates, monitors, and provides hands-on assistance in the areas of automatic data processing and telecommunications. Telecommunications includes all radio, telephone, and microwave communication systems within the state.

Budget

In fiscal year 1985 the BLM initiated a new financial management system. This new system simplified the previous process by greatly reducing the number of elements that must be programmed and monitored. In conjunction with the Bureau effort, the BLM in Wyoming updated its budget planning process to bring it in line with the Bureau system and make it more responsive to the needs of the various organizational units within the state. The Wyoming system will undergo some additional refinement, and it is hoped that it will be adopted in final form in fiscal year 1986.

Table 1 shows the fiscal year 1985 operating budget for the BLM in Wyoming.



The Honeywell Level 6 Computer is one of many systems that provide support to major programs within the BLM.

Table 1
Operating Budget for Fiscal Year 1985
BLM in Wyoming
(in thousands of dollars)

Program	State Office	Worland District	Rawlins District	Rock Springs District	Casper District	Statewide Program Totals
Oil & Gas Management (Public Lands)	2,751	1,221	1,375	1,367	1,677	8,391
Oil & Gas Management (Indian Lands)	11	0	0	0	3	14
Coal Management	1,325	69	481	259	914	3,048
Oil Shale/Tar Sands Mgmt.	6	0	0	0	0	6
Mineral Materials Mgmt.	82	31	33	52	31	229
Mining Law Adm.	249	86	32	19	21	407
Mineral Management (Nonenergy Leasing)	53	55	9	74	12	203
Uranium Mgmt.	10	0	0	0	4	14
Rights-of-Way	228	92	191	324	172	1,007
Lands Program	427	113	94	93	139	866
Withdrawal Proc. & Review	107	7	18	18	11	161
Forest Management	65	44	99	90	73	371
Forest Development	83	63	24	29	61	260
Wild Horse & Burro Mgmt.	134	42	83	1,648	6	1,913
Grazing Management	337	659	890	649	370	2,905
Cultural Resources Mgmt.	61	28	40	50	44	223
Wilderness Management	90	72	103	67	55	387
Recreation Management	45	47	83	62	47	284
Soil, Water & Air Mgmt.	430	186	179	176	169	1,140
Hazardous Waste Mgmt.	21	3	3	3	6	36
Habitat Management	116	179	176	154	143	768
Endangered Species Mgmt.	57	100	68	57	62	344
Fire Management	71	35	36	36	32	210
Multiple-Use Planning	247	92	199	239	45	822
Data Management	234	0	0	0	0	234
Cadastral Survey	487	0	0	0	0	487
Building Maintenance	21	25	62	60	7	175
Recreation Maintenance	18	24	84	75	33	234
Transportation (Road)						
Maintenance	24	64	107	107	47	349
Engineering Services	24	5	103	5	5	142
Resource Protection	118	0	0	0	0	118
Equal Employment Opp.	79	6	6	12	6	109
Administrative Services	1,386	112	179	178	190	2,045
Access	36	14	20	20	15	105
Range Improvements	0	195	609	361	244	1,409
Forest Pest Control	7	0	48	0	0	55
Forest Service Cadastral Survey	40	0	0	0	0	40
OFFICE TOTALS	9,485	3,669	5,431	6,285	4,641	29,511

NOTE: All figures have been individually rounded from computer printouts; columns may not total exactly to figures shown.

Personnel Management

The BLM in Wyoming employs approximately 800 permanent and temporary employees in a wide variety of occupations to accomplish its work. In addition to processing the various types of personnel actions associated with these employees, BLM hires about 170 seasonal employees each year. They are generally students who augment the permanent work force in technical and clerical work from May through October.

The BLM utilizes approximately 25 volunteers annually, with individuals located in the state, district, and resource area offices. These volunteers work in a wide variety of programs such as recreation, operations, resource management, the physical sciences, construction and maintenance, and administrative and clerical capacities. Most of the volunteers come to BLM through one of the following programs: Student Conservation Association (SCA), Student Volunteer, and Green Thumb Inc. The volunteer program provides the volunteer with worthwhile job experience in addition to enabling the BLM to accomplish tasks it might otherwise have to forgo.

Table 2 lists a breakdown of employee numbers by BLM offices in Wyoming.

Table 2
Employee Numbers
By Wyoming BLM Office

Office	Permanent	Temporary ¹	Total
State Office	231	22	253
Worland District	95	6	101
Rawlins District	127	5	132
Rock Springs	133	11	144
Casper District	136	1	137
STATEWIDE TOTALS	722	45	767

NOTE: Numbers shown are those authorized. The actual number of on-board people will be somewhat smaller since 8 to 9% of positions listed are vacant at any given time.

¹ Does not include summer seasonals.

Administrative Services

Worland District personnel, after nearly two years of planning and construction, were finally able to move into their new two-story office and warehouse complex this year. For the first time in several years the district organization is housed under one roof, saving both time and energy. The 26,350 square foot building was constructed by Aardex Corporation of Lakewood, Colorado, and provides open space work areas, conference rooms, map and computer rooms, a break room, and warehouse space.

The Lander Resource Area moved to new quarters in February 1985. This partially earth-sheltered facility provides office, warehouse, and shop space in addition to a storage yard. Within the building itself, 6,500 square feet is allocated to office use and 7,000 square feet to a warehouse and shop.

Efforts are underway to develop a single complex for the Casper District, which is now housed in two separate locations. In addition, a proposal has been made to the BLM's Washington Office to establish a special project office in Gillette for Cadastral Survey to facilitate the high priority survey work needed in the Powder River Basin. The office is expected to be operational in early 1986.



After two years of planning and construction, Worland District personnel moved into their new two-story office and warehouse complex this year.



Lander Resource Area personnel moved into their new partially earth-sheltered facility this year which provides office, warehouse, and shop space in addition to a storage yard.

Information Services

Several significant accomplishments were achieved in both the automatic data processing (ADP) and telecommunications areas. Highlights in ADP were as follows:

Completed installation of a statewide data communications network to all districts and detached resource areas, including high-speed modems and multiplexers plus dedicated data lines.

Provided training and installed 48 terminals and 25 printers at district and resource area offices to complete implementation of the Automated Lands and Minerals Record System (ALMRS). ALMRS provides for the automated processing, tracking, and statistical analysis of lands and mineral cases and related actions.

Cooperated with the Denver Service Center in the operation of the Bureauwide simultaneous oil and gas drawings (oil and gas lottery system) on system enhancement and security improvements.

Worked in conjunction with the Office Services staff to contract for the enlargement of the State Office computer room to accommodate new equipment and improve working conditions. This work will be completed in the early part of fiscal year 1986.

Future plans call for acquisition of additional microcomputers and completing the statewide communication network to link these units with the larger computers at the State Office and the Denver Service Center. A local area network (LAN) is to be installed in the State Office to facilitate the installation of additional pieces of peripheral equipment. LAN will eliminate the need to install a separate communications cable for each piece of new equipment. Staff support and dedication of ADP resources for the Geographic Information System (GIS) will be provided to the districts so that they can have the graphics capability associated with this system at the field level.

Major accomplishments in the area of telecommunications for fiscal year 1985 were as follows:

Completed a pilot effort providing the first microwave link between Rawlins and Lander. The link will be used for data transmission and radio communication. If this effort shows a positive cost benefit ratio, it may be extended to other districts and resource areas.

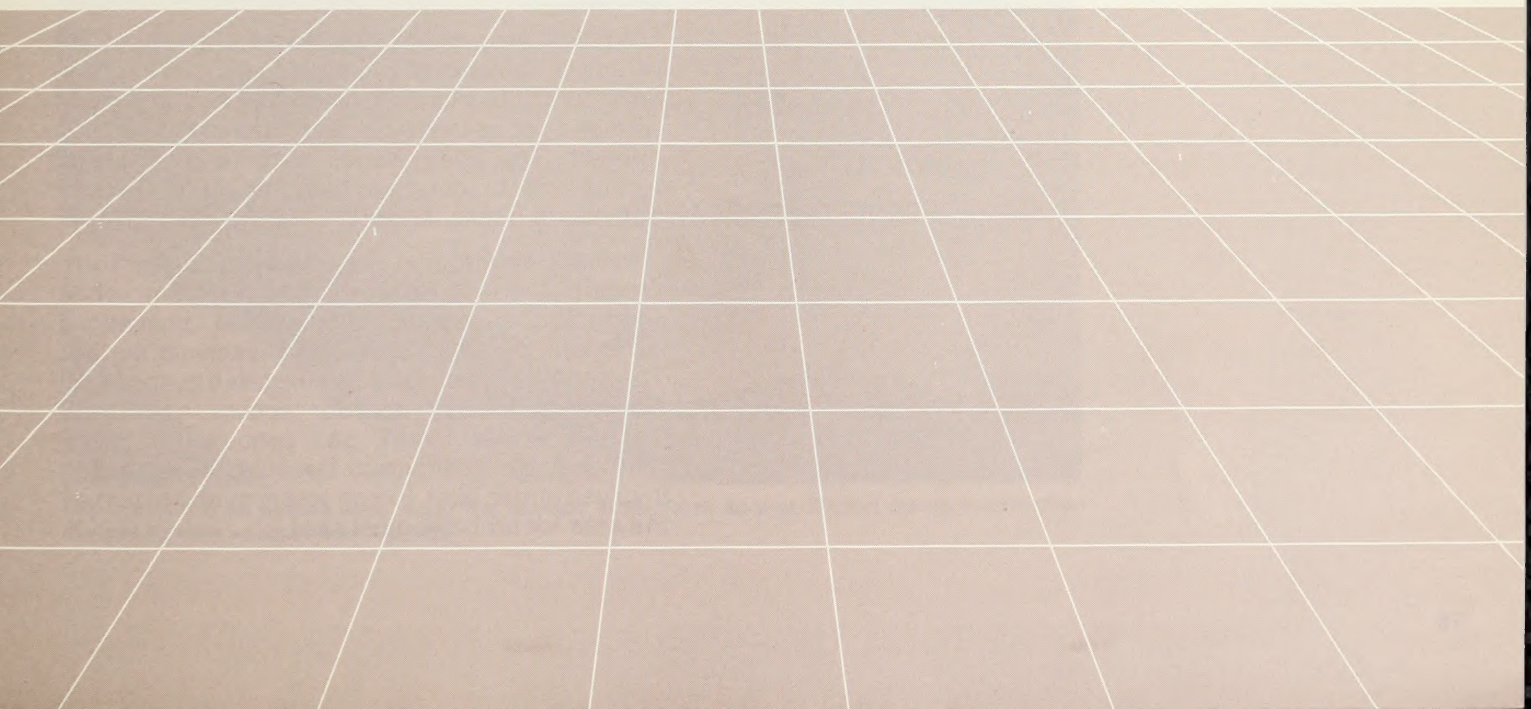
Installed new telephone systems in the Rawlins and Worland District Offices along with new systems in three area offices.

Initiated a cooperative effort with the Forest Service to determine the feasibility of developing a joint statewide microwave communications network.

In fiscal year 1986, BLM plans to install new telephone systems in the Rock Springs District Office and the Cody and Newcastle Resource Area Offices. Work will also be continued with the Forest Service on the microwave study with a view toward developing an operating plan to cover future efforts in this area.



Lands & Renewable Resources



Introduction

The BLM in Wyoming manages a variety of resources, including cultural resources and natural history, forestry, land use, withdrawal processing and review, and recreation and wilderness. Other responsibilities are grazing management, wildlife habitat management, soil, water, and air management, and management of wild horses and burros. In addition, the BLM does land use planning and environmental coordination.

The action programs of the BLM affect a wide spectrum of public land users. The actual on-the-ground programs are carried out at the district and resource area field offices. The State Office provides overall management guidance and policy direction.

Today, more than ever, there is a need for the BLM-administered public lands and in Wyoming for the renewable resources programs to maintain a continued focus toward the future.

Management of Programs

Cultural Resources and Natural History

Under authority of the Historic Preservation Act of 1966, the Archeological Resources Protection Act of 1979, and other statutes, the BLM in Wyoming is committed to protecting significant prehistoric and historic sites for the benefit of the American public. These cultural resources are fragile and irreplaceable. They include sites as diverse as graves, campsites, rock art, trails, stone circles, homesteads, and stone flake or pottery scatters. Some of these sites, such as the Oregon-Mormon Trail, are of overriding national importance and have been so designated through legislation.

In carrying out its responsibility to protect cultural resources, the BLM inventories its lands for prehistoric and historic sites. Sites evaluated as "significant" are nominated to the National Register of Historic Places. Plans are developed for long-term management of important archeological or historic sites or districts. Sites that are deteriorating or those that are threatened by natural or human factors undergo emergency or long-term protection or stabilization. Removal or excavation of cultural resources from public lands requires a permit issued by the BLM.

Much of the cultural resource management program in Wyoming is oriented to protecting prehistoric or historic sites in the path of extensive minerals/energy or lands development. Before activities such as pipelines, oil well pads, or highway rights-of-way can be approved, a cultural resource survey to identify sites is conducted in the project area. Significant sites that cannot be avoided are salvaged, or the adverse impacts are mitigated.

Another area in the program is the management of caves, fossil areas, unique geological formations, unusual plant associations, and important wildlife species that have recreational or scientific interest. The BLM issues permits to qualified institutions to conduct paleontological investigations on public lands.

In late summer 1984, archeologists from Western Cultural Resource Management, while conducting archeological mitigation excavations for Exxon, discovered two 1,500-year-old burials. The burials were on land administered by the BLM, along the railroad corridor access road from Exxon's Shute Creek gas processing plant, northeast of Kemmerer. Because construction involved public land, Exxon was required to survey the area for archeological sites.

The burial sites were located on an elevated portion of a campsite that appears to have been occupied periodically from 500 to 5,000 years ago. The two graves were similar in that they were about two feet deep and made within the living area of the ancient tribe. One of the skeletons was very well preserved and was buried with small bits of wood painted red. The significance of the painted wood has not been determined, but the pieces may be of a basket, sandal, or decorative object. It is rare to find wood objects in a site of this antiquity because of the rapid decomposition that wood undergoes.

Along with the two burials, numerous fire pits and stone tools also were found, as were two bottle-shaped storage pits. The discovery of the storage pits may indicate a more permanent campsite than a hunting camp.

Finding two burials at the same site is very rare. Fewer than 30 such prehistoric burials have been found in Wyoming, with only four in the southwestern part of the state. This find affords the chance to compare and contrast the two burials and gain more knowledge of the site. In coming months, archeologists hope to answer a wide variety of questions about the people associated with this site: what their lifestyle was like, what their burial practices were, why and how the individuals in the grave died, and a host of other questions.

Two prehistoric pit houses were found in June in the Rock Springs District during construction of a gas pipeline south of Rock Springs. The two houses are about 4,500-6,000 years old. Only three other sites with the same general characteristics have been found in Wyoming. The pit houses were probably inhabited by a small family group that used the area as a seasonal camp. Each house is a large circular pit about 11 feet in diameter. Each house also contains a hearth and four small features probably used for food storage. A number of tools and antelope and deer bones were also found.

The cultural resources program in the Casper District completed three cultural resource management plans during fiscal year 1985. These plans will allow the district to better protect valuable prehistoric and historic sites and interpret these sites for the benefit of the public. Plans were completed for Cantonment Reno historic fort site, Dull Knife Battlefield, and the Outlaw Cave archeological district.

In the Worland District, compliance with the National Historic Preservation Act was completed for the removal of Soapy Dale Peak Lodge which will be dismantled and installed in the Washakie County Museum.



Two prehistoric pit houses were found this summer in the Rock Springs District during construction of a gas pipeline south of Rock Springs.



Forestry

There are about 421,000 acres of forested public lands in Wyoming. Table 3 indicates the approximate area and production capacity of the forests on BLM-administered public land in Wyoming. About half the forested land is classified as productive forestland, and the other half is classified as woodlands. Lodgepole pine is the most common tree species. Other important species are ponderosa pine, Douglas-fir, Englemann spruce, juniper, and aspen. Forested areas of public land are located either along the fringes of the national forests or on individual mountains. Scattered or isolated forestlands are subject to special problems caused by difficulty of physical or legal access and by distance to markets.

Wood products utilized from the forests include sawlogs, posts and poles, fuelwood, and Christmas trees. In recent years the demand for fuelwood has increased dramatically, and the BLM in Wyoming sells about as much volume in fuelwood as sawlogs. Table 4 shows the amounts of products harvested in recent years.

Many of the lodgepole pine stands are mature or overmature and highly susceptible to mountain pine beetle attacks. Stand management is needed to maintain tree vigor and prevent tree mortality. Management normally includes harvesting of the infested or most susceptible trees.

Dwarf mistletoe and Comandra blister rust continued to be the most damaging diseases to the trees on Wyoming's public lands. Serious management problems are encountered because of the heavy mortality rate from these diseases and from the mountain pine beetle infestation.

Increased emphasis has been placed on forest development in 1985, especially direct seeding, tree planting, and precommercial thinning. This has resulted in the completion of substantial acreage of reforestation and stand improvement. Table 5 lists the forest development completed during recent fiscal years. It is expected this emphasis will continue for several years.

In the spring of 1985, Bighorn Enterprise of Worland, Wyoming, was awarded a 190-acre precommercial thinning contract on Rattlesnake Mountain. About 180 acres of the contract was successfully completed in fiscal year 1985. Bighorn Enterprise is a nonprofit organization that provides employment training.

Table 3
Estimated Area and Production Capacity of Forests
on BLM Administered Land in Wyoming

District	Woodland Acres	Acreage of Commercial Forest Land ¹	Total Acreage	Commercial Standing Volume (MBF) ²	Annual Sawtimber Harvest ³ (MBF)
Worland	33,000	31,000	64,000	128,000	900
Rawlins	53,000	50,000	103,000	245,000	2,100
Rock Springs	64,000	65,000	129,000	385,000	2,500
Casper	61,000	64,000	125,000	210,000	1,200
TOTAL	211,000	210,000	421,000	968,000	6,700

NOTE: Figures are based on the 1974 Extensive Forest Inventory. Current inventory data and new harvest calculations will change the annual harvest volumes.

¹ Forestland capable of producing 20 cubic feet of wood fiber per acre per year.

² MBF = thousand board feet of growing stock.

³ Annual harvest on a sustained yield basis in accordance with multiple-use requirements.

Table 4
Timber Products and Vegetative Disposals by Fiscal Year

FY	Sawtimber Volume (MBF) ¹	Fuelwood Volume (cords)	Post/Poles Volume (MBF) ¹	Christmas Trees (No.)	Total Value (dollar)
1985 ² (Est.)	12,425	9,000	150	2,200	190,000
1984 ²	12,819	8,892	135	1,845	187,948
1983	7,717	8,846	172	3,005	0
1982	6,147	8,020	439	2,844	0
1981	5,792	7,350	210	2,437	0

¹ MBF = Thousand board feet.

² Increased harvest volume resulting from damage to forest areas from Mountain Pine Beetle infestations.

Table 5
Forest Development by Fiscal Year

	Tree Planting (Acreage)	Precommercial Thinning (Acreage)	Site Improvement (Acreage)	Seeding (Acreage)	Stand Conversion (Acreage)
1985 (Est.)	75	390	400	200	30
1984	65	27	350	10	30
1983	197	200	462	15	0
1982	251	201	347	20	0
1981	246	72	460	10	0

Table 6
Grazing Summary for Grazing Fee Year 1984

District	Number of Operators	Cattle	Sheep	Horses	Total Authorized Active Preference in AUMs ¹
Worland	472	217,363	46,660	3,253	341,597
Rawlins	576	504,595	107,105	4,143	768,402
Rock Springs	519	260,909	119,280	2,901	585,610
Casper	1,249	252,934	88,187	387	349,197
TOTAL	2,816	1,235,801	361,232	10,684	2,044,806

NOTE: Grazing fee year runs March 1 through February 28.

¹ Total number of animal unit months of livestock grazing that could be allowed on the public lands.

Table 7
Allotment Management Plans

District	Total Number of AMPs		AMPs Completed in FY 84		AMPs Completed in FY 85	
	No.	Acreage ¹	No.	Acreage ¹	No.	Acreage ¹
Worland	36	635,399	1	1,949	1	3,818
Rawlins	27	982,049	0	0	0	0
Rock Springs	48	2,976,475	1	70,000	1	43,075
Casper	3	26,859	0	0	0	0
TOTAL	114	4,620,782	2	73,260	2	45,582

¹ Acreage figures refer to BLM administered public land.

Table 8
Range Improvements

Type of Investment	Completed FY 84	Completed FY 85
Vegetation Manipulation ¹ (acres)	1,675	2,686
Fences (miles)	95	33
Reservoirs	138	92
Springs	20	14
Wells	16	9

¹ Sagebrush burning to increase production of grass for both stabilization and forage.

Grazing Management

The Bureau of Land Management authorizes livestock grazing on more than 17 million acres of public lands in Wyoming. Approximately 2,800 permittees and lessees are authorized to utilize 2,013,611 animal unit months (AUMs) of forage annually. Table 6 summarizes grazing use on BLM-administered public land in Wyoming during grazing year 1984.

A major priority in the grazing management program is to complete grazing environmental impact statements (EISs) as directed by the Natural Resource Defense Council (NRDC) agreement and court order. To date nine grazing EISs have been completed in Wyoming. Six more are to be done by 1988.

The BLM manages the grazing program in accordance with the final grazing management policy established in 1982. This policy is based on selective management of allotments. Each allotment is placed in one of three categories with the following objectives:

- Maintain current satisfactory condition
- Improve current unsatisfactory condition
- Manage the allotments custodially

The selective management system allows BLM to concentrate management actions, range improvements, and monitoring on allotments with the greatest potential for increased resource production and for resolution of resource use conflicts.

Some grazing allotments are managed under allotment management plans (AMPs). Table 7 lists the AMPs completed in 1985.

Monitoring is conducted to determine if management actions are meeting resource management objectives and to determine if modifications are needed. Factors monitored are actual use, forage utilization, climatic data, and range condition and trend. All monitoring is done in consultation with the livestock operators.

Fifty percent of the annual grazing fees paid by livestock operators is returned to the district in which it is collected for range improvement work. These improvements include fencing and water developments such as reservoirs, springs, wells, and pipelines. Beginning with fiscal year 1985, no range betterment funds were used for the maintenance of rangeland improvements. Maintenance of structural improvements will be the responsibility of the parties deriving the primary benefits, as required by the Rangeland Improvement Program Policy. Range improvements are detailed in table 8.



Several important issues that affect the grazing management program are expected to be resolved by Congress in 1985 or 1986.

The Public Rangelands Improvement Act (PRIA) of 1978 (P.L. 95-514; Stat. 1803) established the current formula for determining the grazing fees to be charged on public rangelands from 1978 through 1985. The PRIA requires the Secretaries of the Interior and Agriculture to report to Congress by December 31, 1985, "...their evaluation of the fee established in Section 6 of this Act (PRIA) and other grazing fee options, and their recommendations to implement a grazing fee schedule for 1986 and subsequent grazing years." The draft report was made available for public comment in April 1985. The public comments, the Secretaries' recommendations, and the final report are expected to be presented to Congress in the fall of 1985.

The Experimental Stewardship Program was authorized by Section 12 of PRIA, which directed the Secretary of the Interior and the Secretary of Agriculture to "develop and implement, on an experimental basis...a program which provides incentives to, or rewards for, the holders of grazing permits and leases whose stewardship results in an improvement of the range condition..." Section 12 of PRIA also requires that the two Secretaries report to Congress on the results of this program. The draft report was made available to the public in June 1985.

Section 403(f) of FLPMA terminates the BLM's grazing advisory boards on December 31, 1985. Whether Congress will pass legislation on or before that date to extend the boards, or after that date to reestablish them, is only speculation at this time.

Land-Use Management

The origin of BLM's lands program goes back to the General Land Office, which was combined with the Grazing Service in 1946 to form the Bureau of Land Management.

When the General Land Office was established in 1812, the government's objective was to encourage settlement of the United States by making land readily available through programs such as homesteading, railroad grants, and state grants. The General Land Office was organized "to survey, manage and dispose of the public lands."

Many public laws were passed that supported the philosophy of land disposal. However, as land became more scarce, public demand for retention of lands in public ownership increased. In 1976 Congress responded by passing the Federal Land Policy and Management Act (FLPMA). This act states that "...it is the policy of the United States that the public lands be retained in federal ownership, unless...it is determined that disposal of a particular parcel will serve the national interest..." FLPMA does not prohibit disposal. Rather, it states that any disposal must be in the public interest and sets forth criteria defining the public interest.

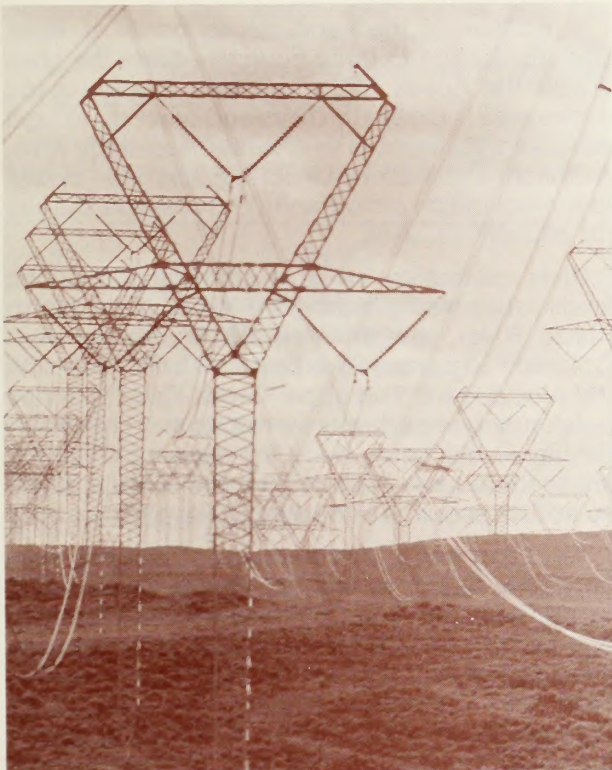
The lands program is responsible for the authorization of various uses of public lands. Rights-of-way are a major part of the lands program in both Wyoming and Nebraska, and several hundred rights-of-way were granted in fiscal year 1985. Most rights-of-way are either for energy production or for public utilities. Uses authorized include highways, powerlines, pipelines, telephone lines, railroads, and communication sites.

Another major program area is land patents. Approximately 60 Indian allotment patents were issued in Wyoming and Nebraska during fiscal year 1985. In addition, several public sales were completed and 15 patents were issued. A patent for an airport was issued in fiscal year 1985, and a public purpose recreation site was granted. In keeping with the retention policy of FLPMA, three land exchanges were patented during fiscal year 1985.

In the Casper District, efforts to dispose of public lands in Nebraska continued during fiscal year 1985. The BLM offered 27 parcels for sale, including four in Weston County. These parcels contained a total of 1,481 acres. Fourteen parcels totaling 723 acres were sold. The Newcastle Resource Area Office continues to offer parcels monthly on a competitive bid basis.

Two exchanges involving 764 acres of public lands were completed. The Casper district also issued two Recreation and Public Purpose Act (R&PP) leases to the City of Casper and the Town of Glendo involving 86 acres. One R&PP patent totaling 560 acres was issued to Sheridan County. In addition, the Casper District issued 170 right-of-way grants during the fiscal year.

In the Worland District, three significant lands cases are being processed. If carried to completion, these will affect significant amounts of public land. Two are private exchanges, one involving about 1,600 acres of selected lands, the other involving about 7,600 acres of selected lands. The third major case is a proposed irrigation project being jointly processed by BLM, the Bureau of Reclamation, and the state of Wyoming. The final size has yet to be decided, but the most favorable alternative is more than 1,200 acres, of which 85-90 percent is public land.



Rights-of-way are a major part of the BLM lands program in Wyoming and Nebraska. Most rights-of-way are either for energy production or for public utilities.

None of these exchanges was completed during fiscal year 1985, although much time and effort was spent in preparation, field examination, meetings, and negotiations. The irrigation project is of special interest to the state as it is one segment of the program to develop new points of use for water allocated to Wyoming in the Missouri River Compact.

The lands program is responsible for processing withdrawals, a procedure which legally removes specific public lands from designated land uses or certain forms of disposal to facilitate federal programs and purposes. For example, a protective withdrawal could be placed on a recreation site to remove the area from specific types of land use or disposal that could interfere with either natural recreation values or constructed facilities. Another type of withdrawal may be made for other federal agencies for a federal program use. This type of withdrawal provides for the transfer of public land management from BLM to another agency, or specifies that management will be shared between BLM and another agency.

The Federal Land Policy and Management Act of 1976 established new withdrawal authority, thereby repealing all the previous authorities by which BLM withdrew lands from the operation of the public land laws. In addition, FLPMA mandated that the Secretary of the Interior must review all existing withdrawals which closed the lands to appropriation under the Mining Law of 1872 or to leasing under the Mineral Leasing Act of 1920. The Secretary must complete these reviews by October 21, 1991. The Department of the Interior issued regulations expanding the requirements of FLPMA, requiring the review of all withdrawals on public lands, not just those closed to mining and mineral leasing laws.

The National Wildlife Federation filed a lawsuit against the Director of the Bureau of Land Management, the Secretary of the Interior, and the Department of the Interior on July 15, 1985. This lawsuit alleges the Withdrawal Review Program has been carried out in a manner that is "... arbitrary, capricious, an abuse of discretion, and otherwise is not in accordance with law." The immediate effect of the lawsuit has been to halt any further progress in the completion of any review of withdrawals.

The initial withdrawal review inventory showed 14.4 million acres of withdrawals in Wyoming subject to FLPMA review. This appears to be an extremely large area of withdrawn lands when there are only 29.9 million acres of federal lands in the state. However, many of the existing withdrawals overlap and the net acreage, which was never determined, is much smaller. The withdrawn lands to be reviewed are held mainly by the Bureau of Reclamation and the Forest Service. The Bureau of Reclamation has been actively reviewing these withdrawals and the Forest Service is beginning its reviews.

Nine withdrawal orders were reviewed in fiscal year 1985. These encompassed 574,500 acres. Withdrawals on 127,420 acres were revoked. When the final orders are signed by the Secretary of the Interior, 111,800 acres will be opened to surface entry and 720 acres to mineral location. Previously, 14,900 acres were patented as Bureau of Reclamation homesteads.

BLM has also initiated several requests to withdraw lands that contain unique or unusual resources. The Secretary of the Interior has recently approved withdrawal of the Horsethief and Natural Trap Caves, as well as Castle Gardens, all in the Worland District, and the White Mountain Petroglyphs in the Rock Springs District.



Off-road vehicle enthusiasts can find many places to explore on BLM-administered public lands.

Recreation

Whether watching the sun rise in the quiet morning splendor of the Red Desert or white water rafting on the North Platte River is your special experience, Wyoming public lands have something for everyone. Hiking the historic Oregon and Mormon Pioneer Trails provides an aesthetic link with the past where one can almost hear the creak of the wagons as they push along toward new lands and opportunity in the West.

Developed recreation facilities in Wyoming include nine picnic areas, five interpretive historic sites, and 17 campgrounds, seven of which require a \$3 fee. Outdoor recreation on the public lands in Wyoming is a many-faceted program. For the off-road vehicle (ORV) enthusiast, there are numerous places to explore. All the public lands are designated in one of three categories for ORV use: open, limited, or closed. The vast majority of the public lands are designated in the limited class, with a much smaller percentage in the open and closed classes. The public lands designated open or closed are posted with appropriate signs to indicate the particular designation in a given area. The limited designation refers to some limitation on the use of ORVs, such as season of use, type of vehicles, or restriction to certain routes.

A portion of the sand dunes north of Rock Springs is open to dune buggies—there they can cruise the dunes for hours. An adjacent sand dunes area is closed to ORVs and other motorized vehicles because it is in a wilderness study area. A 20-acre tract near Rock Springs has been closed to protect Indian pictographs and preserve the site for educational uses.

River recreation on BLM-administered public lands varies from shooting the rapids of the North Platte River where it enters Wyoming from Colorado to canoeing on placid stretches below the Alcova dam. The upper Green River provides outstanding opportunity for rafting and cold water fishing. Public lands along the rivers of Wyoming are scattered and intermingled with private lands, so access should be checked on locally.

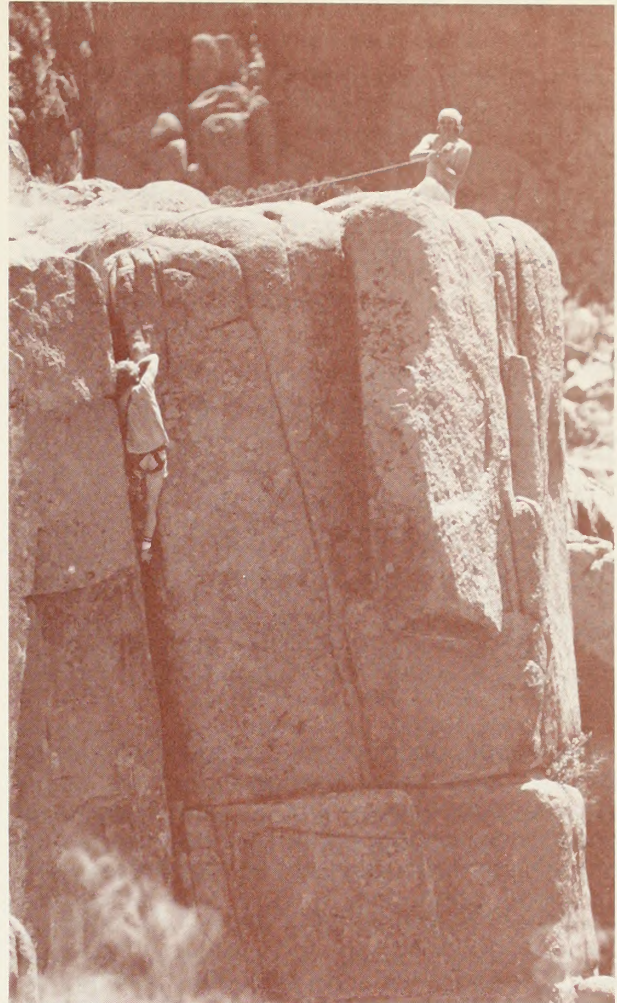
Wyoming has a rich heritage of historic trails on public lands, as well as several outstanding recreation trails. The Continental Divide National Scenic Trail follows the backbone of America as it weaves its way through the high country of the West from Canada to Mexico. The trail passes through the Rawlins District in Wyoming, where it crosses the Oregon, Mormon, California, Pony Express, and Overland Stage trails running east-west across the state. Numerous other lesser-known trails crisscross the state, providing exceptional opportunities for the trail buff.

In late summer, BLM released a draft plan for managing the recreational, cultural, and historical values of the Oregon and Mormon Pioneer National Historic Trails. The plan detailed management actions the BLM will take to protect the historical values of the trails and at the same time provide for other resource development projects in the vicinity. In addition, it provides for a one-mile corridor on either side of the trails. Development projects in the corridor require special stipulations as outlined in the plan. Development projects include oil and gas drilling, road building, pipeline construction, and mineral development. BLM received comments concerning the plan until late October 1985.

The Natrona County Parks Department and the BLM's Casper District recently signed the first cooperative management agreement for recreation in Wyoming. The plan provides for improved maintenance of the Trapper's Route system. Also in the Casper District, three picnic tables were installed at Bessemer Bend, as outlined in the Platte River resource management plan. Protection was enhanced for the Outlaw Cave Pictograph site through signing and barrier installation.

In the Worland District, cave recreation was provided by continuance of the recreation permitting program, providing visitor services, and beginning a cave search and rescue plan. In addition, the district issued permits for eleven horse endurance events and continued its outfitter and guide permitting program.

Table 9 lists the recreational facilities on public land in Wyoming administered by the BLM.



Many opportunities for various types of recreation can be enjoyed on the public lands in Wyoming.

Table 9
Recreational Facilities
on BLM-Managed
Public Land in Wyoming

Item	Amount
Developed Campgrounds	17
National Trails	
Historic (Oregon and Mormon Trails)	320 miles
Scenic (Continental Divide Trail)	253 miles
Off-Road Vehicle Designations	
Open	38,286 acres
Closed	7,245 acres
Limited	9,745,762 acres

Soil, Water, and Air

The BLM is responsible for protecting and enhancing the soil, water, and air resource values that provide the basic life support systems for all renewable resources as well as for people and animals. Included in the program's objectives are inventories, monitoring for potential impacts, erosion control, and use of proper watershed practices.

Soil

Soil data obtained from soil surveys are necessary for planning activities that will disturb or that have the potential to disturb the land surface. Such activities include road construction, recreation development, timber and grazing management, oil and gas exploration or development, and mining. The survey is a systematic examination of soils in the field and in laboratories to obtain their description and classification in order to determine their behavior under special uses.

Soil surveys are conducted in cooperation with the Soil Conservation Service as outlined in the National Cooperative Soil Survey Agreement. Although several past soil surveys were conducted through contracts, the current ongoing surveys are being conducted by BLM field office soil scientists. In 1985 the BLM will have completed approximately 1.5 million acres of soil survey. This includes completion of surveys on all of the public land administered by BLM in Big Horn County. Soil surveys have been completed on more than 70 percent of the public land administered by the BLM in Wyoming.

Water

All the public lands in Wyoming are either in one of four major river drainages—Missouri, Colorado, Great Basin and Columbia—or in the closed Great Divide Basin. Seven rivers drain these larger watersheds.

The BLM conducts water inventories to gather background water quantity and quality data so trends can be projected and impacts can be assessed. Monitoring is conducted to determine impacts from specific actions such as mining, oil and gas development, grazing, and forestry. The BLM gathers and analyzes water data in cooperation with the U.S. Geological Survey and the Wyoming Department of Environmental Quality. The BLM protects the water resource as required by the Clean Water Act and other federal and state laws and regulations. All water uses not part of a federal reserved right are filed with the Wyoming State Engineer for appropriative rights.

In order to plan watershed improvement and funding, the BLM prepares watershed activity plans before initiating actions. In 1985 a watershed activity plan was completed on the Bates Hole watershed (Casper District), a draft plan was completed on Muddy Creek watershed (Rawlins District), and a sub-basin analysis was added to the Red Creek Watershed Plan (Rock Springs District).

The BLM coordinated with the Wyoming Department of Environmental Quality on Fifteenmile Creek and Muddy Creek to obtain study goals as planned under Section 208 of the Clean Water Act, regarding non-point source pollution. BLM also provided water quality sampling equipment to Western Wyoming College to assist in the college's effort to sample streams and analyze sources of nutrients that are contributing to the degradation of water quality occurring in the Flaming Gorge Reservoir.

The BLM in Wyoming has been a leader in the Bureau's air resource management program. Wyoming BLM personnel have taken the lead in acid rain issues by acting as coordinators for monitoring, aiding other BLM states in monitoring site installation, representing the Bureau on a regional acid rain task force, and overseeing funding for the bureauwide analysis contract with the National Atmospheric Deposition Program and the National Trends Network program. BLM in Wyoming has endeavored to integrate air resource management concerns fully into its planning system and to ensure that consideration of air quality is part of the BLM's multiple resource management.

Air

In addition, BLM supports the management of air resources through cooperation with state and other federal agencies, careful planning of development projects, and collection of air resource data. The focus of this activity is to ensure that air quality is enhanced or preserved through careful management practices. For example, climatic and meteorological data are collected on BLM-managed public land to support multiple-use programs. Instruments used for this data collection range from simple devices such as weighing rain gauges to sophisticated remote automatic weather stations that send information once every three hours via satellite.

Since 1981, acidic deposition (acid rain) monitoring has been conducted at three Wyoming sites on public land in Pinedale, Newcastle, and Sinks Canyon. These sites have been designed to give early warning of potential acidification to Wyoming's environment from air-transported pollutants. At the sites, rainfall is captured in a bucket with a moisture-sensing device that allows the collection bucket to be open only during rainfall events. Once a week buckets containing the weekly samples are sent to the Central Analytical Laboratory in Champaign, Illinois, to be analyzed for acidifying substances.

The data from these analyses are used by the BLM and others in assessing potential responses of the environment to the addition of chemical pollutants from new air pollution sources. These sites, which were some of the first operated anywhere by BLM, are part of a nationwide program called the National Atmospheric Deposition Program. BLM in Wyoming is the coordinator for the agency's involvement in this national research endeavor. Because of the consistently high quality of Wyoming BLM's operation, maintenance, and placement of sites, two of the sites were designated in 1985 as National Trends Network ecoregion baseline sites to provide representation of ecological trends in Wyoming and Utah.

Prudent management of air pollution impacts requires that potential environmental impacts be well understood before a new air pollution source is approved. To meet this need, BLM, in cooperation with the Forest Service and Colorado State University, has developed a unique system of computer models named the Topographic Air Pollution Analysis System (TAPAS). In Wyoming, TAPAS has been used to identify the potential impacts from release of sour natural gas and guide to research into potential acid rain impacts to sensitive wilderness.

Through TAPAS simulation modeling, coordinated with state agencies such as the Wyoming Department of Environmental Quality and federal agencies such as the National Park Service and the Forest Service, air pollution emission sources are evaluated for air resource impacts before they are built. The evaluation of these potential impacts allows BLM to plan orderly, responsible development of minerals and other resources while avoiding or minimizing adverse impacts to the environment or the public. In 1985 this technology was used to aid the planning of development of natural gas rich in hydrogen sulfide on public lands in southwestern Wyoming. In addition, during 1985 BLM in Wyoming developed a smoke management screening model that is now being used to assess potential air quality impacts from controlled burns.

The BLM in Wyoming also has been involved in protecting valuable air resources through coordination with other state and federal agencies during 1985. As a member of the Western Atmospheric Deposition Task Force of the Environmental Protection Agency, Wyoming BLM has represented the agency on acid rain issues throughout the intermountain west. In addition, Wyoming BLM has been an advisor and participant in the Forest Service's national acid rain and wilderness values research project. Presentations were made to state, local and federal agencies during the past fiscal year concerning operational demonstrations and lectures on air resource management techniques in smoke management.

Wilderness

The wilderness program for the BLM in Wyoming began in 1979, when the BLM began to inventory the public lands for areas that possess wilderness qualities. Forty-four areas were designated as Wilderness Study Areas (WSAs); however, nine were dropped in December 1982 when the Secretary of the Interior eliminated areas of 5,000 acres or less. In April 1985 a court order directed reinstatement of those areas, resulting in 44 WSAs in Wyoming with a combined acreage of approximately 575,000 acres.

BLM began studying these designated areas in 1981 and making recommendations on whether they should be designated as wilderness or managed for other resource values such as oil and gas, coal, or other commodities. To date, BLM has completed studies on 19 areas. Of the 19 areas completed, four areas comprising 82,802 acres have been preliminarily recommended for wilderness designation through the planning process.

In April 1985, the President recommended to Congress that one of the four areas, Scab Creek WSA near Pinedale, be designated wilderness. The other three areas preliminarily recommended for designation are Sand Dunes, 16,280 acres, north of Rock Springs; Honeycomb Buttes, 36,647 acres, northeast of Rock Springs; and Ferris Mountains, 22,245 acres, north of Rawlins. BLM recommendations on designation or nondesignation of these three areas will be forwarded to the President along with recommendations on other WSAs in Wyoming after the remaining studies are completed.

This fiscal year the Worland District prepared two draft wilderness environmental impact statements—Grass Creek/Cody and Washakie. A total of nine wilderness study areas are being considered under these two reviews. The status of BLM wilderness review in Wyoming is shown on table 10.

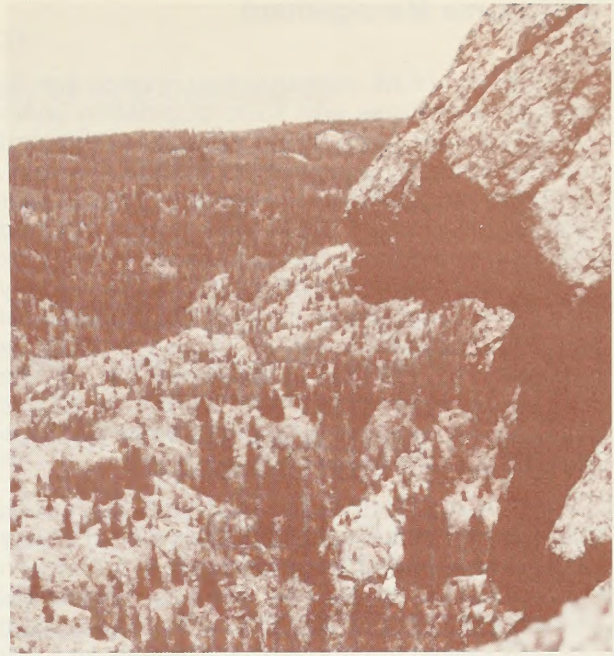
Table 10
BLM Wilderness Review in Wyoming

Wilderness Study Areas on Wyoming BLM-Managed Public Land								
Total Number	Acreage	Preliminarily Recommended Suitable		Preliminarily Recommended Nonsuitable		Wilderness Study Reports Prepared		
		No.	Acreage	No.	Acreage	Name of Document	No. of WSAs	Date Reported ¹
44	575,000	4	85,808	15	272,637	Rock Springs District Study	13	4-26-84
						Scab Creek Study	1	5-15-81
						Adobetown/ Ferris Mtn. Study	2	9-11-84
						Buffalo Resource Area Study	3	7-31-85

¹ The study is "reported" when the preliminary final environmental impact statement is forwarded to the Director of the BLM in Washington. This completes the responsibility of the BLM State Office in the study process. At this point the study becomes the responsibility of the BLM Washington Office and the Department of the Interior. After the Secretary of the Interior makes his recommendation to the President, the President then recommends designation or nondesignation of each area to Congress. The ultimate decision on each wilderness study area will be made by Congress.

During the time the wilderness studies are being completed, and until Congress takes final action on each WSA recommendation, the WSAs are being managed under BLM's interim management policy. The policy requires that the wilderness characteristics of each WSA must be protected until Congress has an opportunity to review recommendations and either designate the areas as wilderness or release them from the review process. Even though Wyoming has been experiencing intensive energy development for the past several years, BLM has generally been able to avoid development in WSAs and retain each in its natural condition.

Wyoming's WSAs cover a wide spectrum of landforms, ecosystems, and vegetative types. Some WSAs are mountainous with all the characteristics of alpine wilderness. Other areas are desert, sand dunes, or starkly beautiful badlands where herds of wild horses roam. As studies are completed, Wyoming undoubtedly will contribute some truly unique additions to the National Wilderness Preservation System.



The Scab Creek wilderness study area in Wyoming was among four study areas nationwide to be recommended by the President to be designated as wilderness.



Adobe Town, located in the BLM Rawlins District, is one of 44 wilderness study areas in Wyoming.

Wild Horse Management

Wyoming BLM management goals are to maintain wild horse and burro population levels in balance with the carrying capacity of the land and the habitat requirements for wildlife, livestock, and other multiple uses. At the end of fiscal year 1985, approximately 6,000 wild horses roamed Wyoming's rangelands, predominantly in the Rock Springs and Rawlins Districts. There are virtually no natural predators to control the numbers of these animals. Removal of excess animals is necessary to maintain a balanced use of the rangeland resources. The Wyoming BLM's management goal is a population of approximately 2,800 wild horses (see table 11).

Wild horse roundups received increased attention in Wyoming and nationwide in fiscal year 1985 when Congress appropriated \$16.7 million for removal of excess wild animals. Wyoming's share of that amount was \$1.9 million. As a result of the increased funding, a goal of gathering 4,000 wild horses was established, more than twice the number gathered last fiscal year. Concurrently, a goal of arranging the adoption of 3,000 wild horses was established. Both goals were exceeded. A total of 4,269 horses were gathered and 3,884 were adopted, as indicated on tables 12 and 13.



Spider, formerly a wild horse roaming the public rangelands in Wyoming, now lives on a ranch near Cheyenne earning his keep as a cow pony and a treasured family pet.

Much of the success of gathering the wild horses can be attributed to the use of helicopters, as authorized by FLPMA. The helicopter pilot spots the horses from the air, then slowly drives them toward a camouflaged trap. On the ground, wranglers on horseback who are in radio contact with the helicopter crew complete the roundup by herding the horses into the trap and watching for strays.

Immediately following their capture, the horses are transported to the BLM central holding facility in Rock Springs. Following arrival at the facility, each animal is inspected for brands, blood tested, inoculated, and freeze branded with a special identification mark. Horses are then placed under BLM's "Adopt-A-Horse" program. The animals are placed with adopters by matching the animal with the specifications indicated by the applicant. A fee of \$125 is charged for each animal adopted under normal circumstances. As a means of moving less desirable horses (such as older males and females) from Bureau feeding and expense to private maintenance and care, the Bureau has approved some reduced fee adoptions. After one year of proper care, which must be certified by a veterinarian, ownership through title transfer can be obtained.

Approximately 500 horses can be cared for at BLM's holding facility in Rock Springs, so additional space was needed this year to allow BLM to continue roundups throughout the year. A temporary holding facility was contracted with the Wyoming State Fairgrounds in Douglas to hold, feed, and care for the additional animals gathered during the winter and spring months.

In addition, three contracts for wild horse and burro holding facilities were awarded to contractors in Nebraska, Nevada, and Texas. The Nebraska facility, located in Bloomfield and operated by Clark Mills and Son, is administered by the BLM in Wyoming. The facility became operational in May and, depending upon need and available funding, may be extended through fiscal year 1987. Three thousand horses can be maintained in Bloomfield; however, unlike the adoption centers, the holding facility contracts contain no provisions for placing animals in private maintenance. Animals are transported from the holding facilities to adoption centers as adoption demand dictates.

Table 11
Wyoming Wild Horse Inventory by BLM District (FY)

District	80	81	82	83	84	85	Management Levels
Worland	658	708	828	1,025	853	442	200
Rawlins	3,442	3,932	4,318	4,549	4,827	3,795	1,100
Rock Springs	6,068	5,470	4,638	4,111	3,394	3,744	1,500
TOTAL	10,168	10,110	9,784	9,685	9,614	7,981	2,880

NOTE: Wild horse inventories normally are conducted during the winter months, January through March. Casper District has no wild horses.

Table 12
Wyoming Wild Horses Gathered for Adoption

District	Number of Horses Gathered ¹		
	1983	1984	1985
Worland	—	—	535
Rawlins	491	622	1,655
Rock Springs	1,234	1,062	2,079
Casper	—	—	—
TOTAL	1,726	1,684	4,269

Note: Casper District has no wild horses.

¹ Total includes privately owned animals gathered.

Table 13
Wild Horses Sent To Other States For Adoption

Receiving State	Number of Horses Adopted	
	1984	1985
Wyoming	757	1,330
New Mexico	187	734
Montana	300	897
Eastern States	142	774
Idaho	—	149
TOTAL	1,386	3,884

Table 14
Big Game Population Using
Public Lands in Wyoming
(FY 85 estimate)

	White-Tail Deer	Mule Deer	Antelope	Elk	Moose	Bighorn Sheep
Worland	600	31,000	7,000	8,000	100	65
Rawlins	600	77,800	90,000	11,500	150	1,100
Rock Springs	0	40,000	30,000	7,500	2,000	0
Casper	2,600	21,400	31,400	2,000	0	10
TOTAL	3,800	170,200	158,400	29,000	2,250	1,175

Based on BLM Annual Wildlife Report statistics covering total state big game populations.

Table 15
Wildlife Habitat Management Plans
Fiscal Year 1985

District	HMPs Being Written	HMPs in Process of Implementation	Completed¹ HMPs
Worland	2	4	0
Rawlins	0	8	2
Rock Springs	2	5	0
Casper	3	0	2
TOTAL	7	17	4

¹ An HMP is considered completed only after the plan has been fully implemented.

Table 16
Wetlands Habitat by District

	Stream Miles		Pond, Lake, Reservoir Surface Acres	
	Game Fisheries	Other	Game Fisheries	Other
Worland	275	1,582	555	4,995
Rawlins	260	4,044	110	14,400
Rock Springs	700	1,000	1,460	13,140
Casper	92	408	60	950
TOTAL	1,327	7,034	2,185	33,485

Wildlife Habitat Management

Overall Responsibilities

BLM management of wildlife habitat ensures full consideration for wildlife values in multiple use decisions for public lands. Such habitat values hold a particularly important meaning since more than 50 percent of Wyoming's big game animals, including the white-tailed deer, mule deer, antelope, elk, moose, and bighorn sheep utilize BLM lands in the course of their annual life cycle (see table 14).

Concern for wildlife is not limited to habitat for big game species. Wetland and nongame species habitat and the needs of threatened and endangered species must be considered in any action taken by the BLM. BLM biologists conduct surveys to delineate important habitats and subsequently develop habitat management plans (HMPs) for the purpose of protecting and integrating these features into the multiple use management decisions. Table 15 displays the HMPs on BLM-managed public land in Wyoming.

This fiscal year the Rawlins District planted approximately 600 willow stems along a one-mile stretch of perennial stream for habitat improvement. In addition, cottonwood stems were planted along the "Miracle Mile" of the North Platte River, and the stems were studied to determine their survival. Ninety-five percent of the trees survived. This effort was associated with a long-term project to improve stream bank habitat.





Wetlands are, acre-for-acre, the most important wildlife habitat type in Wyoming.

The BLM cooperates closely with the Wyoming Game and Fish Department and others in improving habitat conditions, restoring animal populations, providing forage and water, and managing habitats to attain the appropriate wildlife population levels. BLM also welcomes the cooperation of wildlife groups, sportsmen's clubs, and others interested in wildlife habitat management. This fiscal year the Rawlins District cooperated with the Wyoming Game and Fish Department in the Ferris Mountain bighorn sheep transplant.

Protection and restoration of wildlife habitats is required through BLM leases, contracts, and permits for mineral extraction; timber harvest; grazing; and other consumptive resource uses that have the potential of affecting wildlife and wildlife habitat.

Wetlands (streams, reservoirs and ponds, and the associated vegetation zones) are, acre-for-acre, the most important wildlife habitat type in Wyoming. The BLM in Wyoming manages several thousand miles of stream wetland habitat, as well as several thousand acres of pond and lake wetlands and their associated vegetation (see table 16).

Wetlands are a habitat management priority in the BLM and are considered in the development of all activity plans. Protection features for wetlands (such as fences and buffer zones) are incorporated in the development of timber sales, grazing systems, land use authorizations, land tenure adjustments, mineral development, and project development. Many of these wetland areas are high value recreational fisheries of special management interest to the Wyoming Game and Fish Department.

Black-Footed Ferret

The black-footed ferret may be the rarest mammal in North America. The discovery of a viable population of this species in northwestern Wyoming in 1981 was one of the most significant wildlife discoveries in recent years. When the U.S. Fish and Wildlife Service found this population in the Big Horn Basin near Meeteetse, it made available a unique opportunity to study the species. A portion of the area occupied by the ferret population is on BLM-administered public land. Ferrets are given priority consideration on these lands. A habitat management plan for the area is in the process of preparation.

In January 1984 the BLM Wyoming State Office published a document entitled *Handbook of Methods for Locating Black-Footed Ferrets*. This handbook was a cooperative effort with Idaho State University/Biota Research and Consulting, Inc.; U. S. Fish and Wildlife Service's Denver Wildlife Research Center and Endangered Species Field Office, Helena, Montana; the Wyoming State Office of the Bureau of Land Management; and the Wyoming Game and Fish Commission. The handbook provides guidelines for conducting black-footed ferret surveys. It is designed for use by persons who have had little experience with such surveys, but it also should provide new information for more experienced users.

The BLM Wyoming State Office published a second document on this subject in September 1985. In this technical bulletin, *Black-Footed Ferret Habitat: Some Management and Reintroduction Considerations*, the authors (Idaho State University and Biota Research Consulting, Inc.) present much of the currently known habitat information from the Meeteetse ferret population.

A total of 10,000 acres throughout the state was surveyed for ferrets in fiscal year 1985, but no ferret populations were found.





The BLM in Wyoming has taken advantage of the engineering skills of the Beaver to improve stream habitat in several areas of the state.

Beaver Improvement of Stream Habitat

An estimated 83 percent of riparian meadow habitat in southwest Wyoming, with its associated ability to support wildlife and livestock, has been lost to erosion and a lowering of the water table. This has caused adverse effects on the rare and environmentally sensitive Bear River and Colorado cutthroat trout that used to inhabit the streams in this corner of Wyoming.

Over the past six years, BLM wildlife biologists have discovered that beaver aren't necessarily as destructive as popularly believed. Beaver actually can be environmentally beneficial, and by taking advantage of their engineering skills, the BLM can improve the habitat of an area. As beaver dams slow the stream flow, streambank erosion is reduced. The water backing up from the blocked water course raises the water table and traps and increases nutrients in the area. This creates an abundance of aquatic life and terrestrial vegetation, resulting in a more diverse and productive ecosystem.

Two good examples of stream habitat improved by beavers are Currant Creek and lower Sage Creek in the Salt Wells Resource Area. Willow growth had been lost and there was extensive streambank erosion throughout both areas. The owners of the Currant Creek Ranch cooperated with the BLM, and the beaver were brought in to apply their engineering expertise. The BLM supplied aspen logs for the beaver to build strong, stable dams and aspen branches to supplement their winter food cache.

In two years the willow has returned in abundance, streambank erosion has stabilized, and the water table has risen enough to encourage the growth of other vegetation and aquatic life, thus creating a marsh and wet meadow habitat. Since then the method has been introduced to several creeks in the South Pass area in Wyoming. It will be used in additional areas in the future.

Planning and Environmental Coordination

Environmental Protection

Compliance with the National Environmental Policy Act of 1969 (NEPA) is an ongoing effort in Wyoming. On the average, the BLM in Wyoming authorizes approximately 12,000 actions each year that require some type of environmental screening to ensure NEPA compliance.

Approximately 85 percent of the actions taken by the BLM are analyzed through a categorical exclusion process and result in no significant impact.

Environmental assessment (EAs) are conducted on most of the remaining actions. The purpose of the environmental assessment process is to determine if an action would have a significant impact on the environment. This analysis, which incorporates all of the appropriate mitigating measures, usually results in a finding of no significant impact.

An action or project that is determined to be a major federal action or that may have a significant effect on the environment requires the preparation of an environmental impact statement (EIS). On the average, BLM in Wyoming is engaged in five to ten EISs during a given year. Six EISs currently are in progress in Wyoming. These involve such diverse activities as wilderness designation, coal leasing, oil and gas exploration, and pipeline rights-of-way. Table 17 shows the status of EISs in progress or completed in fiscal year 1985.

Land Use Planning

The BLM does three tiers of planning. The resource management plans (RMPs) fulfill the basic requirements of FLPMA, which requires BLM to "develop, maintain, and when appropriate revise land use plans which provide. . .for the use of public lands." The RMP is basically an allocative plan. The resource management planning process integrates planning with the NEPA requirements, and an environmental impact statement (EIS) is an integral part of the plan preparation documents.



Table 17

**Major Environmental Documents in
Progress or Completed During FY 85**

Project Name	Project Description	Lead BLM Office	Affected Wyoming Counties	Status
North Fork Well EIS	Application from Marathon Oil to drill a 5,000-foot exploratory oil well on Shoshone National Forest near Pagoda Creek of the North Fork of the Shoshone River	Worland District Office in cooperation with USFS	Park	Final EIS released 4-85 Decision made public 5-9-85
Bairoil/Dakota CO ₂ Project EIS	Applications from AMOCO, EXXON, and SHELL for right-of-way grants across public lands in Wyoming, Montana, and North Dakota for a 660-mile pipeline (20-16") from near Opal, Wyo., to Bairoil, Wyo., and on to Tioga, N. Dak. A CO ₂ gas injection plant to enhance oil recovery would be built at Bairoil	Casper District Office	Sweetwater, Fremont, Natrona, Johnson, Campbell, Carbon; also Montana and North Dakota	Draft EIS scheduled for 60-day public review 9-13-85 to 11-12-85
Rangely CO ₂ Pipeline	Application from EXXON and CHEVRON to construct a 174-mile 24" and 16" pipeline from Shute Creek near Opal, Wyo., to Rangely, Colo., to transport carbon dioxide for enhanced oil recovery purposes at Rangely, Colo.	Rock Springs District Office	Lincoln, Sweetwater; Utah and Colorado	Decision made public 4-85. Construction began in 5-85
Deer Creek Reservoir	Bureau of Reclamation proposal to build a reservoir near Glenrock, Wyo. BLM public lands are involved in right-of- way.	Casper District Office in cooperation with the Bureau of Reclamation	Converse	Work on draft EIS has begun
Westside Irrigation Project	Bureau of Reclamation proposal to provide additional water for irrigation from existing canals. Some BLM public lands may be sold.	Worland District Office in cooperation with the Bureau of Reclamation	Washakie	Work on draft EIS has begun

Table 17 (Continued)

Project Name	Project Description	Lead BLM Office	Affected Wyoming Counties	Status
Getty Oil Application for Permit to Drill (APD) (Bear Thrust)	Request from Getty Oil to drill an 8,000-foot exploratory well on Bridger-Teton NF about 14 miles SE of Jackson, Wyo. (Note: DEIS was released in early 1981 with a final release in 1982. The documents have been the subject of lawsuits in Federal Court most of the interim time. On July 18, 1985, Judge Brimmer notified the DOI that a supplemental EIS would have to be prepared before a decision on the Getty (now Texaco) request could be made.	Rock Springs District Office	Teton	Awaiting the outcome of litigation.
Thermopolis/Alcova Transmission Line	A Department of Energy proposal to upgrade or reconstruct about 157 miles of electrical transmission lines in central-southeastern Wyoming	Wyoming State Office and Casper District Office in cooperation with the Dept. of Energy.	Natrona, Fremont, Hot Springs	BLM cooperated on EIS. Decision made public to grant right-of-way on April 1985.
Rock Springs Wilderness	Bureau recommendation to the Secretary of the Interior for wilderness designation on public lands	Rock Springs District		Preliminary final under review by OEPR.
Cody/Grass Creek Wilderness	Bureau recommendation to the Secretary of the Interior for wilderness designation on public lands.	Worland District		Draft completed in early 1985.
Adobe Town/Ferris Mountain Wilderness	Bureau recommendation to the Secretary of the Interior for wilderness designation on public lands.	Rawlins District		Preliminary final under review by OEPR.
Powder River Preference Right Lease Application (PRLA) (coal)	Processing of PRLA for coal leasing in the Powder River Coal Region.	Casper District		Draft on hold pending policy directive.
Powder River Coal Leasing (Round II)	Preparation for Coal competitive lease sale.	Casper District		Draft completed January 1984. Final is on hold pending policy directive.

After the resource management plans are completed, activity plans are prepared for the various programs; for example, allotment management plans for grazing, habitat management plans for wildlife, or watershed plans. The activity plan, which establishes how and when actions will be allowed, constitutes the second tier of the planning process.

The final tier of BLM's planning process is the project plan in which an action is actually planned, implemented, and funded. All plans are monitored continually, and they are reviewed and updated when new information becomes available.

The primary responsibility to prepare and implement plans rests with the resource area managers. Public participation and input is encouraged and required throughout the planning process.

Land use planning was underway in 1985 in six resource areas: Washakie, Lander, Kemmerer, Pinedale, Platte River, and Buffalo. The final plans and records of decision were completed on the Platte River and Buffalo Resource Areas. The draft plans for Kemmerer and Lander were completed. Washakie and Pinedale plans will be complete in 1986.

Planning will continue in 1986 on the Washakie, Lander, Kemmerer, and Pinedale plans, and the Cody and Medicine Bow plans will be started. Platte River and Buffalo plans will be operational and the activities will be brought into compliance and their effects monitored. The status of Wyoming planning is shown on table 18.

Table 18
Status of BLM Planning Documents in Wyoming

District	Resource Area/ Planning Unit	Public Land Acreage	Management Framework Plan	Resource Management Plans	
				Draft	Final
Worland	Cody	1,013,000	1972	1986 start	1988
	Washakie	1,141,000	1972	1986	1986
	Grass Creek	1,004,000	1982	1987 start	1990
Rawlins	Divide	2,159,000	1983	1986 start	1989
	Medicine Bow	1,760,000	1977	1986	1987
	Lander	2,444,000	1980	1985	1986
Rock Springs	Big Sandy	2,004,000	1983	1987 start	1989
	Salt Wells	1,243,000	1983	1988 start	1990
	Kemmerer	1,633,000	1982	1984	1986
	Pinedale	925,000	1974	1986	1987
Casper	Platte River	1,418,000	1980	1984	1985
	Newcastle	353,000	1982	1988 start	
	Buffalo	799,000	1978	1984	1985
	Nebraska	8,528	1984	1987 start	1988
			Plg. Anal		

Minerals



Introduction

The Wyoming BLM is responsible for administering the minerals management laws on all federally owned minerals in Wyoming and Nebraska with the exception of certain minerals on lands administered by the Forest Service. Although the Forest Service is responsible for administering locatable and salable minerals on that agency's lands, patents, contests, and appeals are administered through the BLM. In addition, BLM administers the leasable minerals on Forest Service lands, while the Forest Service administers the surface estate. The Wyoming BLM also assists the Bureau of Indian Affairs in supervising the minerals on Indian lands.

There are three categories of federal minerals, which are characterized by the type and the authority under which they are administered:

Locatable Minerals are those which may be located under the claim system established by the General Mining Law of 1872. These minerals include metallics such as gold, silver, lead, zinc, and uranium, as well as some nonmetallics such as bentonite.

Salable Minerals are those that may be sold under the Materials Sales Act of 1947. They include common varieties of minerals such as sand, gravel, stone, and scoria.

Leasable Minerals are those that may be leased under the Mineral Leasing Act of 1920 and the Geothermal Steam Act of 1970. Leasable minerals are oil and gas, oil shale, coal, phosphate, sodium (trona), sulfur, potassium and geothermal resources, as well as otherwise locatable minerals such as bentonite and uranium on acquired lands when the minerals are also acquired.

Table 19 lists the mineral leases in effect on BLM-administered public land and acquired lands in Wyoming. (Acquired lands are those owned by the federal government that have been previously patented and reacquired by purchase or condemnation and compensation.)

The state of Wyoming derives significant income from taxes on production of federal minerals. In addition, the state receives 50 percent of all bonus royalty and rental payments collected by the Minerals Management Service on productive and nonproductive public land leases. Table 20 shows the leasable mineral production in Wyoming in recent years, together with the value of the minerals and the royalties collected from them.

Leasable Minerals

Fluid Leasable Minerals (Oil and Gas)

Major Responsibilities

The major functions of the oil and gas operations program are as follows:

Determining what lands are within known geologic structures (KGSs).

Selecting tracts in KGSs for competitive leasing, conducting lease sales, and accepting or rejecting bids tendered.

Offering lands outside of KGSs for noncompetitive oil and gas leasing, receiving applications, conducting drawings to establish priority, and providing security against abuse of the program.

Processing over-the-counter, noncompetitive offers for leasing non-KGS oil and gas lands.

Issuing all onshore oil and gas leases, receiving application fees and rentals, approving assignments, and conducting adjudicative actions as necessary.

Reviewing and approving all applications necessary for the conduct of oil and gas operations. Ensuring the technical competence of the applications, and giving due consideration to resource conservation and environmental protection during the approval process.

Ensuring operational compliance with laws, regulations, lease terms, and any conditions specified when approval was granted.

Ensuring that production is handled and measured properly so that royalties due to the United States or to Indian tribes are paid in the correct amounts.

Table 19
Mineral Leases in Effect
on BLM-Administered Public
and Acquired Lands in Wyoming
in Fiscal Year 1985

	Leases	Acreage
Oil and Gas	33,734	23,748,591
Coal	110	235,839
Sodium and Phosphate	50	75,245
Bentonite (acquired lands only)	1	160
Uranium (acquired lands only)	1	2,560

Table 20
Leasable Mineral Production, Value, and Royalties
From Public and Acquired Lands Within Wyoming

Mineral	FY	Production	Value (\$)	Royalties (\$)
Oil and Condensate (barrels)	83	70,365,923	1,968,236,679	245,226,661
	82	69,427,471	2,087,339,044	254,512,214
Natural Gas (thousand cubic feet)	83	232,242,658	820,032,812	101,386,854
	82	212,512,199	584,643,202	72,359,411
Gasoline & Liquid Gas (gallons)	83	118,352,974	57,539,396	2,763,574
	82	60,952,570	37,800,717	1,916,166
Coal (tons) ¹	83	N/A		
	82	63,612,335	788,411,390	21,331,355
	81	59,576,163	580,670,187	17,289,702
Sulfur (tons) ¹	83	N/A		
	82	2,264,784	461,590	18,563
	81	353,111	638,032	23,075
Phosphate (tons) ¹ (There currently are phosphate leases; however, there is no production on them at this time.)	83	N/A		
	82	0	0	0
	81	0	0	0
Sodium (tons) ¹	83	N/A		
	82	N/A		
	81	N/A		
TOTAL	83	N/A		
	82	N/A	3,414,305,937	352,607,381
	81	N/A	3,239,691,188	320,045,848

¹ From Minerals Management Service's 1982 Report on Receipts. Fiscal years 1984 and 1985 data unavailable at press time.

Oil and Gas Leasing

The Mineral Leasing Act of 1920 and the subsequent Acquired Lands Act provided that lands included in KGS must be leased competitively. Lands not in KGSs are leased non-competitively. (A KGS is an area that is productive for oil and gas, the limits of which include all acreage that is presumptively productive.)

In October 1983, the BLM temporarily suspended drawings under its simultaneous oil and gas leasing program pending implementation of new guidelines for determining the extent of KGS lands. The Secretary of the Interior ordered further improvements to the leasing system in January 1984. Changes in the simultaneous system were implemented that require advance payment of first-year rentals, calculated at one dollar per acre, in addition to the nonrefundable \$75 application fee to be submitted for each parcel.

Since October 1983, the BLM has increased its efforts to ensure that KGSs are properly and fully delineated on the basis of geology, that they incorporate all lands possible within the established definition of KGS, and that no lands are leased noncompetitively that should be leased competitively.

In fiscal year 1985, determinations were made of 760 KGSs in Wyoming encompassing 6,490,987 acres. Determinations also were made of 16 KGSs in Nebraska covering 40,817 acres, for a total of 776 KGSs encompassing 6,531,804 acres.

The Casper District hosted a panel from the National Academy of Sciences on the Bureau's concept and methodology of KGS determinations. Representatives from each district presented samples of how they determine a KGS, and BLM Wyoming State Office representatives provided input as to the State Office role in KGSs. The National Academy is trying to determine whether a better definition is needed of the term "KGS" to meet both the intent of Congress in the Mineral Leasing Act of 1920 and the change in the art of oil and gas exploration in the last 65 years. The Academy also wants to determine the effect that a new definition would have on leasing of oil and gas on federal lands.

Competitive leases are made available for bid and the lease is awarded to the highest qualified bidder. Competitive issuance of leases is required if the lands are included in a KGS or on Indian lands. Parcels determined to be located within a KGS are offered for lease competitively every two months. The parcels are auctioned by sealed bid, and those located on Indian lands are offered by the Bureau of Indian Affairs according to demand and availability. High bids are evaluated to determine if fair market value has been offered for the parcels. This evaluation results in either acceptance or rejection of the bids.

Income from BLM competitive sales decreased significantly during fiscal year 1985. In fiscal year 1984, the high bid for a single parcel (in February 1984) was \$6,125,000. Total sales in fiscal year 1984 from competitive oil and gas bidding were \$23,892,483.05. In fiscal year 1985, the high bid for a single parcel in December 1984 was \$1,610,420. In fiscal year 1985, the BLM in Wyoming offered 813 tracts for competitive sale. These tracts comprised 222,424 acres and attracted high bonus bids of \$17,674,834.

Noncompetitive lands offered over-the-counter are public lands that are open to leasing but have never been leased. The second noncompetitive method is the simultaneous system, which includes lands that have been previously leased. Leases on these lands have been relinquished, have expired, or have been canceled or terminated. This leasing system is computerized. Table 21 shows the oil and gas leases issued by the BLM in fiscal year 1985. Table 22 indicates the number of oil and gas leases in effect in recent years.

Posting of tracts for resumption of the simultaneous oil and gas leasing system under the new rules began in August 1984. A primary goal of the new system is to refund advance rentals to unsuccessful applicants in time for their possible use in the next filing. After one year, the new system is fully operational and has resulted in a nearly two-thirds reduction in volume of applications. Simultaneous oil and gas leases are offered every two months.

The BLM in Wyoming processes simultaneous oil and gas leasing for the BLM nationwide. In fiscal year 1985, 14,426 noncompetitive parcels totaling 32,445,252 acres were listed. These parcels attracted 389,557 applications, with associated fees of \$28,833,211. Gross receipts for the year were slightly less than half a billion dollars.

The number of applications filed for oil and gas leases is a significant indication of the interest in federally managed oil and gas. Table 23 shows the filings for recent years.

The royalties received for the leases are at a rate of 12-1/2 to 25 percent for oil, and 12-1/2 or 16-2/3 percent for gas. The annual rental payments are \$2 per acre.

Table 21
Federal Oil and Gas Leases Issued in FY 1985

	Type of Lease	Number	Acreage	Return (\$)
Wyoming	Competitive	757	140,592	16,343,420
	Noncompetitive	7,905	22,724,740	499,906,130
Nebraska	Competitive	62	17,466	0
	Noncompetitive	0	0	0

Note: Competitive leases are required if the lands are included in a known geologic structure. Noncompetitive leases are for "open" lands where no previous interest has been shown. Noncompetitive leases also include the "simultaneous" drawing of offers for leases which have been relinquished or have expired.

Table 22
Oil and Gas Leases
in Effect in Recent Years

Fiscal Year	Number of Leases	Acreage
Wyoming		
1985	33,734	23,748,590
1984	34,109	23,089,633
1983	33,418	23,443,704
Nebraska		
1985	413	262,934
1984	379	258,447

Table 23
Oil and Gas Filings in Recent Years

Year	Noncompetitive Filings			Other Filings			
	No. of Applications Filed	No. of Parcels Filed On	Average No. Of Filings Per Drawing	Open Land Applications	Competitive Leases	Lease Segregations	Assignments
1985	212,406	2,678	35,401	217	587	295	18,448
1984	30,637	555	30,637	138	501	350	13,606
1983	573,684	2,525	114,737	106	93	228	20,265
1982	819,186	3,160	136,531	276	127	321	17,638
1981	1,630,645	1,290	271,774	657	157	346	19,031

Table 24
Oil and Gas Actions Approved
Fiscal Years 1982 through 1985

	Wyoming				Nebraska			
	82	83	84	85	82	83	84	85
Applications for Permit to Drill	1,418	1,099	1,359	1,009	5	0	4	7
Geophysical Notices of Intent	365	457	507	333	0	0	0	0
Approved Geophysical Notices of Completion	435	432	266	185	0	0	0	0
Sundry Notices	3,208	1,892	3,442	7,058	0	0	21	33

Table 25
Oil and Gas Status Summary
Fiscal Year 1985

Part A

Land Category	Number of Holes	Producible and Service Completions					
		Active		Shut-In		Input & Disposal¹	Total Complete
		Oil	Gas	Oil	Gas		
Federal	12,049	8,222	1,760	298	319	2,847	13,446
Indian	730	500	111	0	5	139	763
TOTAL	12,779	8,730	1,871	298	324	2,986	14,209

Part B

Land Category	New Holes Drilling		All Other Holes Not Plugged and Abandoned	Holes Plugged and Abandoned	Total Holes
	Active	Suspended			
Federal	242	4	3,390	14,854	30,540
Indian	7	0	70	529	1,336
TOTAL	249	4	3,460	15,383	31,876

NOTE: Producing and service completions are wells in which at least one zone has been completed for oil or gas or for service use.

¹ Input refers to a well in which fluid is pumped down the hole, pushing reservoir fluids to a producing well. Disposal refers to a well through which water, usually salt water, is returned to subsurface formations.

Oil and Gas Activity

The number of applications for permit to drill (APDs) is one of the key indicators of the level of activity for oil and gas. Geophysical notices are an indicator of interest in exploration, while sundry notices indicate activity during and after drilling operations. A sundry notice can include anything from surface construction to plugging and abandonment of a well. Table 24 shows selected oil and gas actions that have been approved in recent years.

Although drilling activity was down for fiscal years 1984 and 1985, there have been some notable occurrences in the districts. In the Rock Springs District, the Riley Ridge natural gas project by Exxon in Sublette, Lincoln, and Sweetwater counties is in a full construction phase with more than 6,000 workers involved in field and gas plant construction. Exxon revised its original proposal to develop and operate a deep well gas field with associated pipelines, treatment plants, and facilities for handling and transporting by-products. The company divided the project into two phases while markets were being developed.

Phase I consisted of a 39-well gas field and a gas sweetening plant with capacity to process 600 million standard cubic feet per day (MMSCFD). Phase II will include 25 more gas wells and 720 MMSCFD (cumulative) gas sweetening capacity in three 240 MMSCFD modules. Exxon applied for approval to begin Phase II, and an environmental assessment for the project was completed in June.

Since 1983, the Worland BLM District has worked in cooperation with the Forest Service to prepare an EIS on Marathon Oil Company's APD No. 34-13 wildcat well in the North Fork drainage of the Shoshone River. The APD was approved in March 1985. Because of environmental concerns, no road was built to the location. Instead, the rig, equipment, and crews were transported to the site by helicopter. This was the first airmobile drilling operation in the state of Wyoming, and, to our knowledge, it is only the second in the continental United States. Drilling operations began on July 30, 1985. Since then, the location has received intense scrutiny from both BLM inspectors and FS personnel. The well was plugged and abandoned on September 11, 1985.

The oil and gas status summary (table 25) gives an accounting of wells under the jurisdiction of the Wyoming BLM and their disposition as of the end of fiscal year 1985. The "New Holes Drilling" section of the table indicates the fiscal year in which drilling actually began.

Table 26
Unit Agreements and Communitization
Agreements in Effect at the End
of Fiscal Year 1985

	Land Category	Unit Agreements		Communitization Agreements
		Exploratory	Secondary	
Wyoming	Federal	285	175	1,206
Nebraska	Federal	0	0	0
Wyoming	Indian	5	3	17
Nebraska	Indian	0	0	0



The first airmobile drilling operation in the state of Wyoming was done on a wildcat well in the North Fork drainage of the Shoshone River.

Unit and Communitization Agreements

Unit agreements and communitization agreements are formed in the interest of conservation or for the purpose of the orderly development of oil and gas reserves.

A *unit agreement* is an agreement or plan for development operation. The agreement provides for the recovery of oil and/or gas from the lands, made subject thereto as a single consolidated entity without regard to separate ownerships, and for the allocation of costs and benefits on a basis as defined in the agreement or plan (30 CFR 226.2).

A *communitization agreement* is an agreement to combine two or more mineral leases in order to have sufficient acreage to comply with the spacing required to drill a well.

Both the lessees and the federal government gain from unit and communitization agreements. An exploratory unit is used while the operator determines the areal extent of a pool. Secondary units formed after the pool is defined use enhanced recovery techniques, normally waterflood, to increase production efficiency.

Wells are spaced at given intervals for protection and development purposes. Communitization agreements are formed between two contiguous leases, when necessary, to commit the proper number of acres for spacing requirements.

Table 26 lists the unit and communitization agreements in effect at the end of fiscal year 1985.

Solid Leasable Minerals

Introduction

Solid leasable minerals on all federal lands include coal, sodium (trona), phosphate, and potassium. Bentonite and uranium are also leasable minerals on acquired federal lands.

Wyoming is one of the top ten mineral-producing states in the United States, ranking first in bentonite production (65%), first in soda ash (trona) production (85%), and second in uranium production nationwide. Most of the production of bentonite and uranium comes from privately owned mineral and surface estates.

The BLM's responsibilities for administering federal solid minerals include delineating coal tracts and processing applications for competitive leases, preference right leases, and prospecting permits. Inspection and enforcement also are responsibilities of the BLM in administering federal solid minerals.

Solid Minerals Other Than Coal

Table 27 shows the number of current solid mineral leases and prospecting permits (except those for coal) for federal minerals in Wyoming and Nebraska.

A competitive sodium lease sale in late fall 1985 involved approximately 2,600 acres of federal sodium.

Table 27
Solid Mineral Leases and Prospecting
Permits for Federal Minerals Other Than Coal

Commodity	Number of Leases	Lease Acreage	Number of Prospecting Permits	Permit Acreage
Bentonite	1 ¹ (WY)	160	17 (WY)	9,334
Sodium (trona)	49 ¹ (WY)	75,056	2 (WY)	4,680
Uranium	1 ¹ (WY)	2,560	20 (NE)	25,363
Phosphate	1 (WY)	189		
TOTALS	52	77,965	39	39,377

¹ Producing as of 12-31-85, 10 of the 49 sodium leases were producing.

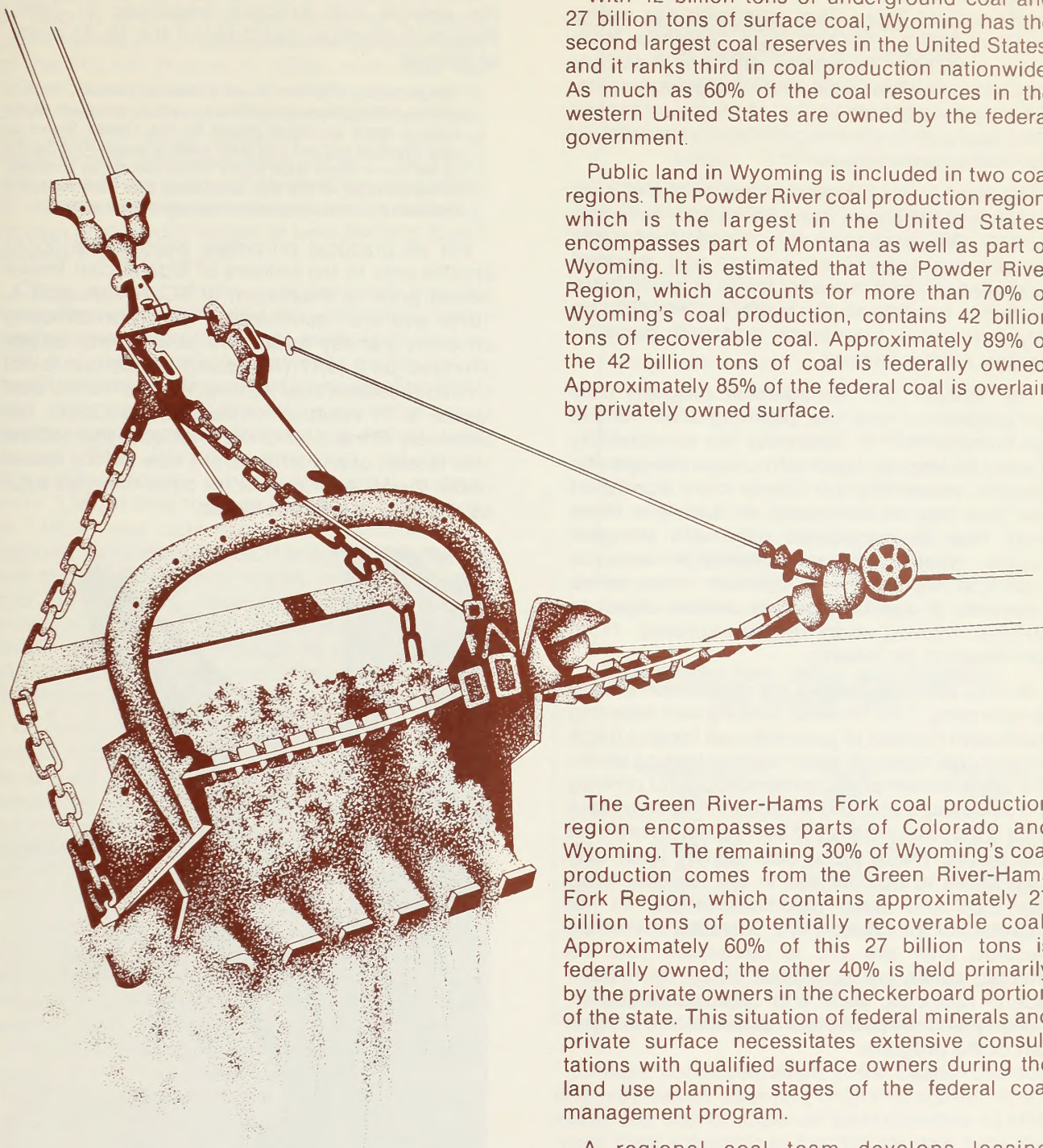
Coal

With 42 billion tons of underground coal and 27 billion tons of surface coal, Wyoming has the second largest coal reserves in the United States, and it ranks third in coal production nationwide. As much as 60% of the coal resources in the western United States are owned by the federal government.

Public land in Wyoming is included in two coal regions. The Powder River coal production region, which is the largest in the United States, encompasses part of Montana as well as part of Wyoming. It is estimated that the Powder River Region, which accounts for more than 70% of Wyoming's coal production, contains 42 billion tons of recoverable coal. Approximately 89% of the 42 billion tons of coal is federally owned. Approximately 85% of the federal coal is overlain by privately owned surface.

The Green River-Hams Fork coal production region encompasses parts of Colorado and Wyoming. The remaining 30% of Wyoming's coal production comes from the Green River-Hams Fork Region, which contains approximately 27 billion tons of potentially recoverable coal. Approximately 60% of this 27 billion tons is federally owned; the other 40% is held primarily by the private owners in the checkerboard portion of the state. This situation of federal minerals and private surface necessitates extensive consultations with qualified surface owners during the land use planning stages of the federal coal management program.

A regional coal team develops leasing recommendations for each coal production region. The Wyoming State Director of BLM chairs the Powder River Regional Coal Team. Voting members on this team are the Wyoming Governor's representative, the Montana State Director of BLM, and the Deputy State Director for Mineral Resources from the Bureau's Wyoming State Office.



The Wyoming Governor's representative and the Bureau's Wyoming State Director are also voting members on the Green River-Hams Fork Regional Coal Team. That team also has voting members and a chairman from Colorado. Both teams also have nonvoting advisory members from various federal, state, and local governments. The main duty of both teams is to guide all phases of the coal activity planning process in accordance with coal program regulations.

The Powder River Regional Coal team met June 5, 1985, and the Green River-Hams Fork team met June 13, 1985. Each team determined which tracts are still the subject of interest and initiated redelineation procedures for tracts in which there is interest. In addition, the teams are establishing data adequacy standards and will conduct regional market analysis.

The federal coal management program uses comprehensive land use planning and multiple use management to determine the acceptability of areas for leasing. Areas with unique site-specific resource values that are clearly more significant than coal may be eliminated, or leasing in these areas may be considered only with stringent cultural, wildlife, and paleontological resource protection stipulations. In addition, areas where a majority of qualified surface owners object to surface mining may be eliminated from consideration for leasing.

Activity planning follows the completion of land use planning. This involves ranking and selecting a sufficient number of potential coal leasing tracts within a coal region to meet regional leasing levels. The development of recommendations for ranking and selecting tracts and for scheduling coal lease sales is the responsibility of the respective regional coal teams. These teams also identify lease sale alternatives to be analyzed in the regional lease sale EISs and make recommendations to the Secretary of the Interior. The Secretary makes his decision after the EIS is completed and the affected states are consulted. Input from other federal agencies, state and local governments, industry, and the public is an essential and integral part of the program.

The Federal Coal Leasing Amendments Act of 1976 (FCLAA) amended the Mineral Leasing Act of 1920 (MLA). Section 3 of the FCLA will affect the federal coal program beginning in 1986. Section 3 [Section 2(a)(2)(A)] of the MLA reads as follows:

The secretary shall not issue a lease or leases. . .to any person, association, corporation. . .where any such entity *holds* a lease or leases issued by the United States to coal deposits *and has held* such lease or leases for a period of ten years when such entity is not, except as provided in Section 7(b) of this Act, producing coal from the lease deposits in commercial quantities (emphasis added).

For all practical purposes, Section 2(a)(2)(A) applies only to the holders of federal coal leases issued prior to enactment of FCLAA (August 4, 1976) and is a "qualification" provision affecting an entity's ability to acquire new federal leases. The Section 2 (a)(2)(A) leasing prohibition is not limited to federal coal leasing. When a federal coal lessee is in violation of Section 2(a)(2)(A), the Secretary of the Interior may not issue that federal coal lessee, or any affiliate, *any* new federal leases under the MLA for coal or for other minerals such as onshore oil and gas leases.



Section 7 of the FCLAA also will affect the coal leasing program beginning in 1986. Section 7 is a provision of the FCLAA that amended the MLA of 1920. It requires that the holder of a federal coal lease issued or readjusted after the enactment of the FCLAA (August 4, 1976) must meet the diligence requirements of producing coal in commercial quantities within ten years from either the date of lease issuance or the date of readjustment. Any lease that is not producing coal at the end of ten years will terminate by operation of the law. Congress currently is considering various proposed changes to both Section 3 and Section 7 of the FCLAA.

Other aspects of the coal program include processing competitive and noncompetitive lease applications, preference right lease applications (PRLAs), exploration licenses, exchanges, modifications, and lease readjustments. The BLM also supervises and inspects exploration and mining operations on federal and Indian coal leases. This includes ensuring maximum economic recovery, approving logical mining units (LMUs) and the administrative operations of LMUs, and calculating recoverable LMU reserves. In addition, the BLM ensures compliance with the requirements of the Mineral Leasing Act and amendments thereto, permit and lease provisions, leasing and operating regulations, certain environmental regulations and guidelines, and other applicable requirements, including diligent development and continuous operations.

An emergency bypass tract near Kemmerer was sold to Pittsburgh and Midway Coal Company in fiscal year 1985. Other coal program activities completed during the fiscal year included offering the Medicine Bow emergency bypass near Rawlins for sale and rendering decisions on coal exchanges requested by Red Rim, Belco, Gulf, and Whitney Benefits.

Tables 28 and 29 show statistics and current activities involving federally owned coal in Wyoming. (There are no coal leases or mines on federal lands in Nebraska.) It should be noted that some of the public land acreage and the acquired acreage involves surface administered by the Forest Service. This situation occurs in the Thunder Basin National Grassland of the Powder River region and to a lesser degree in southwestern Wyoming. Although the Forest Service manages the surface in these instances, the mineral leasing responsibility falls within the BLM's jurisdiction. BLM/FS coordination is required on all activities involving Forest Service administered lands.

Table 28

Miscellaneous Coal Actions and Statistics for Federally Owned Coal in Wyoming

Activity	Amount or Number
Coal leases (total)	110
Public lands	235,679 acres
Acquired lands	160 acres
Producing leases	27
Coal mines ¹	28
Tracts sold in 1985	2 (total of 16.18 million tons)
Exploration licenses	3 encompassing 4,387 acres
PRLAs	60 encompassing 22,199 acres

¹ 11 of the top 20 producing mines in the United States are located in Wyoming.

Table 29

Coal Production, Value, and Royalties 1980 through 1984

FY	Production (tons)	Value (\$\$)	Royalties (\$\$)
1984	68,436,138	737,741,564	22,648,666
1983	67,975,848	87,230,033	15,168,037
1982	63,612,335	788,411,290	21,331,355
1981	59,576,163	580,670,187	17,289,702
1980	33,433,532	297,092,692	8,700,686

NOTE: Information is the latest available from Minerals Management Service.

A major accomplishment in the Casper District this year was an inventory of all exploration holes within the district. Data on approximately 18,000 holes were entered into a computer data base for use in future tract delineation, exchanges, product verification, and planning of other drilling programs.

Mining Law and Salable Minerals

Mining Law Minerals

The locatable minerals program of the BLM involves administration of the public lands under authority of the General Mining Law of 1872 and Section 314 of the Federal Land Policy and Management Act of 1976 (FLPMA).

The General Mining Law provides for the staking and location of mining claims on available public lands for locatable minerals. Locatable minerals are metallic minerals such as gold, silver, lead, zinc, and uranium, and nonmetallic minerals such as bentonite. The three principal types of mining claims that are commonly encountered and for which a mineral patent can be issued under the General Mining Law are lodes, placers, and millsites.

FLPMA requires that all mining claims located on available public lands under the General Mining Law must be recorded with the BLM within specific timeframes. Thereafter, for a claim to remain in good standing, annual filings must be made with BLM. These FLPMA mining claim recordation requirements are in addition to state law requirements pertaining to mining claims.

Mineral patents passing ownership title are issued upon application for mining claims on which a discovery of a valuable locatable mineral has been made.

At the beginning of fiscal year 1985, a total of 41 mineral patent applications were on file with the BLM in Wyoming and pending various actions. A total of 13 mineral patents involving 13 mineral patent applications were issued during fiscal year 1985. Table 30 presents information pertaining to mineral patents issued during fiscal years 1983, 1984, and 1985.

A total of 227,490 unpatented mining claims had been recorded with BLM in Wyoming under FLPMA, at the beginning of fiscal year 1985. During fiscal year 1985, 1,260 new mining claims were recorded and 39,768 mining claims were closed. Of the mining claims closed, 31,731 were a direct result of the April 1, 1985, decision of the U.S. Supreme Court (United States et al. vs Locke et al.), which upheld the constitutionality of the requirements of FLPMA for recordation of mining claims. Table 31 presents information pertaining to unpatented mining claims under FLPMA for fiscal years 1983, 1984, and 1985.

Table 30
Mineral Patent Statistics
Fiscal Years 1983, 1984, and 1985

Patents Issued	Number of Claims Affected	Type of Claims	Mineral	Acres
Fiscal Year 1985				
13	51 ¹	Placer	Bentonite	863.170
Fiscal Year 1984				
11 ²	34 ³	Placer	Bentonite	546.160
1	19	Millsite	N/A ⁴	95.000
12	53			641.160
Fiscal Year 1983				
29 ⁵	128 ⁶	Placer	Bentonite	2,439.890
1	67	Lode	Uranium	1,222.697
1	129	Millsite	N/A ⁴	641.205
31	324			4,413.792

¹ Includes portions of 9 claims.

² Includes one patent involving two claims (40 acres) canceled and reissued.

³ Includes portions of 10 claims.

⁴ No minerals are involved in a millsite patent; a patent is issued on nonmineral land that is deemed essential to mining.

⁵ Includes one patent involving 11 claims (180 acres) canceled and reissued.

⁶ Includes portions of 45 claims.

Table 31
Unpatented Mining Claims
Recorded Under FLPMA
Fiscal Years 1983, 1984, and 1985

Fiscal Year	Number Recorded At Beginning of Fiscal Year	Number Recorded During Fiscal Year	Total Number At End of Fiscal Year
1983	219,967	2,642	222,609
1984	222,609	4,881	227,490
1985	227,490	1,260	228,750

Salable Minerals

The BLM's authority to dispose of mineral materials (salable minerals) comes from the Material Act of July 31, 1947, as amended. Some mineral materials on BLM-administered public land are petrified wood and common varieties of sand, stone, gravel, pumice, pumicite, cinders, and clay. The authority to dispose of mineral materials also extends to lands on which the mineral rights have been reserved to the United States.

The Materials Act of 1947, as amended, enables the BLM to sell mineral materials at a fair market value for construction projects. The act also authorizes the BLM to provide mineral materials free of charge to state and county agencies and to municipalities and nonprofit organizations for use in their specific projects; these materials are let through free use permits (FUPs).

Table 32 shows the mineral materials disposals for recent years.

Records

Record Keeping Responsibilities

The BLM in Wyoming has the largest records branch in the Bureau of Land Management. Its duties include record keeping for 17,809,173 acres of public land and for an additional total of 11,630,705 acres of reserved federal minerals underlying private lands in Wyoming. In addition, the BLM keeps the records of 12,127,862 acres under the administration of other federal agencies in Wyoming.

Because public lands in Nebraska are under the administrative jurisdiction of BLM in Wyoming, the Wyoming BLM keeps records on 8,687 acres of public land and 106,450 acres of federal mineral reserves underlying private lands in that state. In addition, the Wyoming BLM keeps records on 394,377 acres in Nebraska under Forest Service administration.

Table 32
Mineral Materials Disposals
for Fiscal Years 1983, 1984, and 1985

Type of Disposal	Cases Processed	Volume Sold (in cubic yards)	Value (dollar)
Fiscal Year 1985			
Competitive	5	2,000,000	1,185,000
Negotiated	37	691,047	227,723
FUPs ¹	75	7,236,416	2,279,827
Community Pit Sales	160	36,616	29,047
TOTAL	277	9,964,079	3,721,597
Fiscal Year 1984			
Competitive	3	522,000	330,000
Negotiated	26	353,977	172,085
FUPs ¹	33	1,360,400	496,540
Community Pit Sales	113	15,323	10,922
TOTAL	175	2,251,700	1,009,547
Fiscal Year 1983			
Competitive	1	200,000	50,000
Negotiated	24	178,825	64,783
FUPs ¹	37	1,688,789	739,696
Community Pit Sales	76	1,042	4,209
TOTAL	138	2,068,656	858,688

NOTE: Figures may not add due to rounding.

¹ Values calculated at a minimum price as the materials are provided free of charge to governmental agencies and municipalities.

Table 33
Lands Administered by Federal Agencies in Wyoming

Agency	Acreage	Percentage of Federal Land in Wyoming	Percentage of Total Land in Wyoming
Bureau of Land Management	17,809,173	59	28
Forest Service	9,254,397	30	14
National Park Service	2,390,303	8	3
Bureau of Reclamation	408,334	2	1
Fish & Wildlife Service	49,463	—	—
Bureau of Indian Affairs	1,296	—	—
Department of Defense	15,995	—	—
Other Federal Agencies	8,074	—	—
TOTAL	29,937,035	99	46

Table 34
**Land and Federal Mineral Estate
Administered by BLM in Wyoming**

District/ Resource Area	Public Land Acreage	Federal Mineral Estate Acreage	Acreage of Total Geographic Area Within Administrative Boundaries
WORLAND	3,154,935	897,586	7,906,782
Cody	1,004,254	340,752	
Grass Creek	997,265	219,065	
Washakie	1,153,416	337,769	
RAWLINS	6,217,698	1,561,132	18,596,210
Lander	2,197,526	347,126	
Divide	1,390,841	1,114,006	
Medicine Bow	2,629,331	100,000	
ROCK SPRINGS	5,823,973	717,956	14,597,872
Pinedale	924,695	427,098	
Kemmerer	1,632,950	116,449	
Big Sandy ¹	2,023,328	75,449	
Salt Wells ¹	1,243,000	98,960	
CASPER	2,612,567	8,454,031	20,890,552
Buffalo	829,439	3,934,538	
Platte River	1,417,106	3,432,702	
Newcastle	366,022	1,086,801	
TOTAL	17,809,173	11,630,705	61,991,416

NOTE: Figures do not include approximately 500,000 acres of other federal land administered by BLM. Administration of minor BLM areas along state boundaries is exchanged with BLM offices in other states (and vice versa) for ease of accessibility.

¹ The Big Sandy and Salt Wells resource areas were combined to form the Green River Resource Area at the end of fiscal year 1985.

Table 33 shows the acreage administered by federal agencies in Wyoming. Table 34 lists the acreage of land and mineral estate administered by the BLM in each district in Wyoming.

The BLM in Wyoming also is responsible for updating all notations to the serial register pages concerning lands and minerals actions. BLM personnel also update land status records, including oil and gas actions, rights-of-way, transfer of public lands into private ownership, and any other actions affecting the public lands. In addition, BLM personnel assist the general public by answering inquiries concerning oil and gas leasing and by interpreting land status records.

Onshore Records

The Onshore Records Office is a detached statewide unit located in Casper. This office maintains copies of all onshore oil and gas lease records generated by the Wyoming State Office and by the district offices. Records are kept of operators, other governmental agencies, owners, and mineral activities between BLM offices and the royalty management operation of the Minerals Management Service.

Other Services

The BLM in Wyoming maintains a public information center in the Wyoming State Office that generally is the initial point of public contact. The individuals assigned to the center help members of the general public to research BLM records concerning ownership, and they answer questions concerning the Bureau's programs. The center also issues Golden Age Passports and Golden Access Passports, which entitle the holder to lifetime admittance to any national park. Golden Age Passports are free for any individual 62 years old or older; Golden Access Passports are free to U.S. citizens who are handicapped, medically blind, or classified as permanently disabled for the purposes of receiving benefits under federal law.

The monetary collection center of the BLM in Wyoming is responsible for processing and depositing from \$80 million to \$100 million received bimonthly from the simultaneous oil and gas leasing program. The collection center also transfers advance rental and filing fees to twelve other BLM state offices, and it originates all accounting advices pertaining to over-the-counter oil and gas lease applications, first year rentals, bonus payments, and all other financial transactions.

The BLM's Automated Land and Mineral Record System (ALMRS) was initiated in the Wyoming State Office in 1982. Since that time, more than 60,000 cases have been entered into the computerized system. All lands and minerals actions affecting the public lands and federally owned mineral estate are entered into ALMRS.

In fiscal year 1985, all district offices, resource area offices, and all branches in the State Office were brought on line. This allows each office to enter and retrieve information from ALMRS. In early fiscal year 1986, ALMRS terminals will be placed in the public room of the state office for use by members of the public.

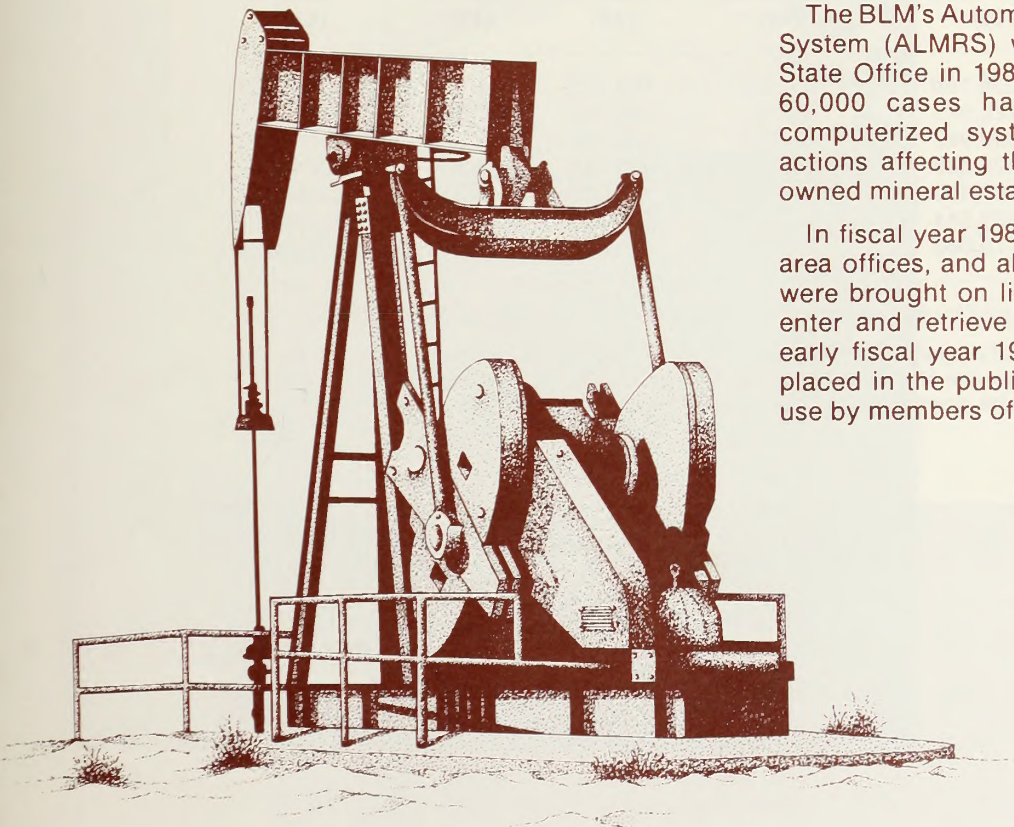


Table 35
Revenue Received by Wyoming BLM by Source
(in thousands of dollars)

Fiscal Year	Minerals Leases & Permits	Sales of Land & Materials	Timber Sales	Grazing Leases, Licenses, & Permits	Other ¹	Grand Total
1984	5,007,534	1,279	104	3,595	975	506,974
1983	424,266	2,211	97	2,419	992	429,985
1982	408,458	167	437	3,138	1,346	413,548
1981	247,563	124	72	3,743	19,905	271,407

NOTE: Figures for 1985 were not available when this document went to press.

¹ Figures includes fees and commissions, rights-of-way, rent of land and other sources.

Table 36
Allocation of BLM Receipts to State of Wyoming

Fiscal Year	Mineral Leases and Permits (\$\$)	Sale of Land and Timber (\$\$)	Licenses and Permits		Grand Total (\$\$)
			Sec. 3 (\$\$)	Sec. 15 (\$\$)	
1984	226,156 ¹	55,333	193,326	311,319	786,134
1983	180,720,075	24,180	283,019	437,167	181,464,441
1982	148,990,982	49,019	332,209	542,336	149,914,546
1981	118,426,836	26,619	305,948	555,204	119,314,607
1980	115,062,500	13,309	195,918	554,345	115,826,072
1979	76,523,544	14,016	250,272	445,446	77,233,278
1978	69,179,000	57,495	205,069	359,742	69,811,306

NOTE: Figures for FY 1985 were not yet available when this document went to press.

¹ Under the Act of August 7, 1947 (61 Stat. 913) collection and distribution responsibilities for receipts under the Mineral Leasing Act of February 25, 1924 (41 Stat. 437;30 U.S.C. 181 et. seq.) were transferred to the Minerals Management Service as of October 1, 1983.

Payments to States and Counties

The federal government regularly shares revenues with state governments from oil and gas leases, from grazing licenses, and from sales of minerals, timber, and other materials and products derived from the public lands. Table 35 shows the revenues received by the BLM in Wyoming from various sources and table 36 lists the revenues paid to the states of Wyoming and Nebraska from such receipts in recent fiscal years.

In addition to revenues shared with the states, the federal government makes annual payments to counties to partially compensate for revenues lost because of the presence of certain tax-exempt federal lands within their boundaries. These payments, which are authorized by legislation approved in 1976, are commonly called "payments in lieu of taxes" (PILT). In-lieu payments are made for tax-exempt federal lands such as those in the national forests and national parks, lands administered by the BLM, and inactive or semiactive military installations. Table 37 lists the in-lieu payments made to counties in Wyoming and Nebraska in fiscal year 1985.



Table 37
Payment In Lieu of Taxes to Wyoming
and Nebraska Counties in Fiscal Year 1985

County	BLM Public Land Acreage	BLM In-Lieu ¹ Payments Made (dollars)	Federal Mineral Reserves on Private Lands ²
Wyoming Counties			
Albany	302,755	435,407	571,266
Big Horn	1,109,061	377,338	110,018
Campbell	236,067	127,689	2,125,460
Carbon	2,037,680	493,410	475,765
Converse	144,091	93,622	1,216,057
Crook	153,282	155,314	371,239
Fremont	2,086,376	794,291	347,126
Goshen	26,657	20,441	209,754
Hot Springs	514,949	270,727	237,679
Johnson	510,972	274,302	1,167,558
Laramie	10,223	7,445	166,975
Lincoln	1,014,355	379,525	115,738
Natrona	1,451,670	970,210	1,275,191
Niobrara	124,245	90,244	622,237
Park	566,257	498,889	340,752
Platte	82,127	77,007	319,207
Sheridan	51,280	294,777	641,520
Sublette	1,257,669	236,215	386,248
Sweetwater	4,309,636	931,518	74,416
Teton	9,734	305,636	40,850
Uinta	529,035	407,092	100,704
Washakie	927,936	337,154	209,137
Weston	76,431	30,143	505,808

Table 37 (Continued)

County	BLM Public Land Acreage	BLM In-Lieu¹ Payments Made (dollars)	Federal Mineral Reserves on Private Lands²
Nebraska Counties³			
Adams	0	105	
Blaine	915	7,987	
Brown	920	812	
Cedar	140	608	
Chase	0	4,180	
Cherry	1,065	96,217	
Custer	44	0	
Dakota	0	586	
Dawes	280	37,329	
Douglas	0	2,200	
Frontier	0	10,449	
Furnas	94	0	
Gage	0	119	
Garden	80	146	
Garfield	0	1,311	
Grant	107	0	
Harlan	0	22,030	
Hitchcock	67	6,975	
Holt	361	263	
Hooker	295	215	
Knox	44	10,870	
Lancaster	0	5,444	
Loup	80	6,502	
McPherson	40	0	
Morrill	811	643	
Red Willow	154	614	
Rock	80	0	
Sarpy	0	863	
Scottsbluff	721	7,757	
Seward	0	497	
Sheridan	232	169	
Sherman	0	5,710	
Sioux	1,676	38,010	
Thomas	242	46,063	
Thurston	0	287	
Valley	0	915	
York	160	117	

NOTE: Acreage figures differ from those in Table 33 because the present law does not allow PILT payment to be made on lands that were not subject to local real taxes prior to their acquisition by the United States.

¹ *Estimated* payment each county receives for BLM lands within its boundaries.

² Figures are not available for federal mineral reserves on private lands in Nebraska.

³ Counties showing receipt of payments but with no BLM acreage are for federal lands other than BLM.



BLM holds competitive oil and gas lease sales every other month for those parcels located in a known geologic structure.



A typical drilling rig on location is used for oil and gas exploration. There were approximately 100 similar rigs drilling in Wyoming during the past fiscal year.

Executive Summary

The global infrastructure market is expected to grow at a CAGR of 4.5% from 2014 to 2020, reaching a value of \$1.2 trillion. The market is driven by the need for infrastructure development in emerging markets, particularly in Asia and Latin America. The market is segmented into transportation, energy, and water supply. The transportation segment is the largest, followed by energy and water supply. The market is also segmented by region, with Asia and Latin America being the largest markets.

The market is characterized by a high level of competition, with major players including Bechtel, Fluor, and Jacobs. The market is also characterized by a high level of risk, particularly in emerging markets. The market is also characterized by a high level of volatility, particularly in the energy sector. The market is also characterized by a high level of complexity, particularly in the transportation sector.

The market is expected to continue to grow, driven by the need for infrastructure development in emerging markets. The market is also expected to continue to be characterized by a high level of competition, a high level of risk, a high level of volatility, and a high level of complexity. The market is also expected to continue to be segmented by region, with Asia and Latin America being the largest markets.

The market is also expected to continue to be segmented by sector, with transportation being the largest sector. The market is also expected to continue to be segmented by company, with Bechtel, Fluor, and Jacobs being the largest companies.

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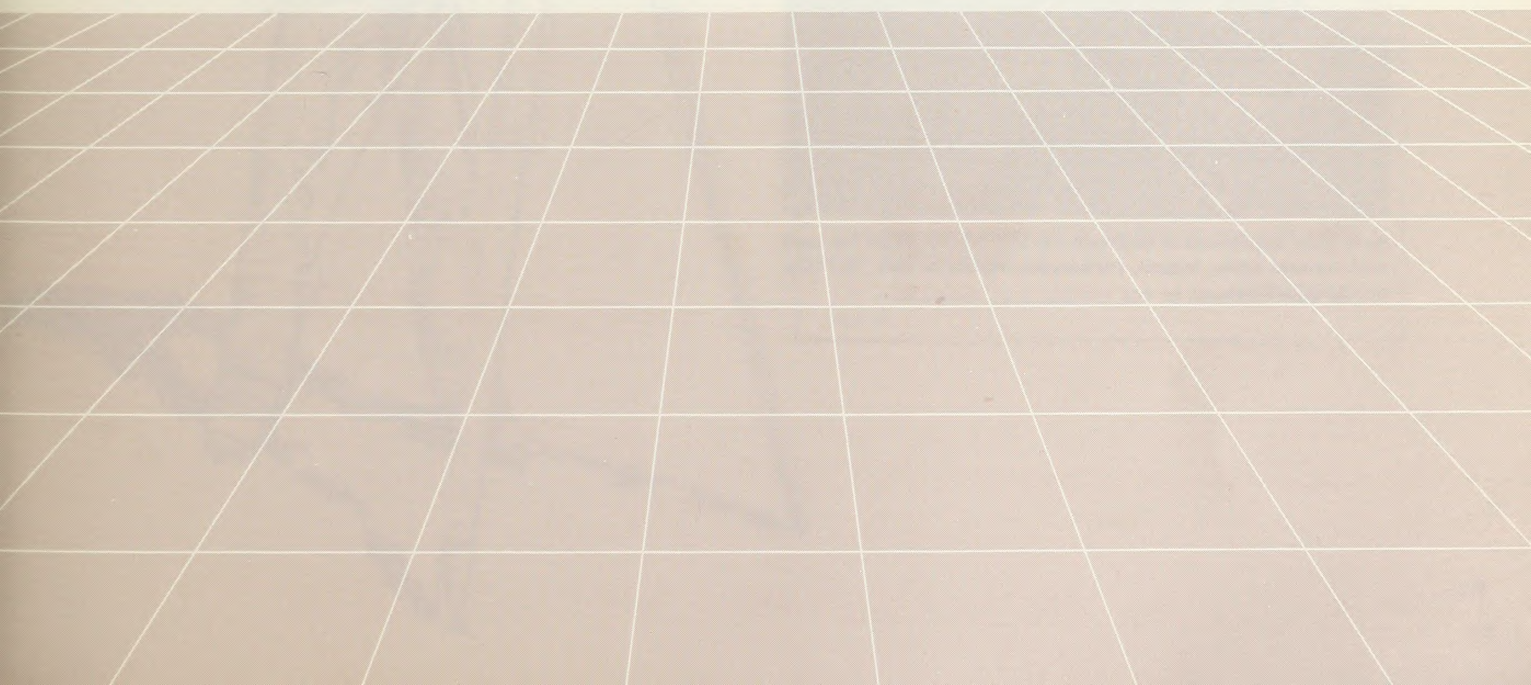
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Operations



Introduction

The Operations functions provide technical support to BLM offices throughout Wyoming. The State Office provides statewide consolidated services for appraisal, cadastral survey, law enforcement, aerial photography and remote sensing, fire management, aviation, engineering, and technographic and mapping services. District offices provide operational functions such as contract aviation use, fire management, engineering survey and design, access acquisition and supervision of construction and maintenance of facilities. The Rock Springs Operations staff is responsible for gathering wild horses in Wyoming and the Rawlins Operations staff constructs signs for all BLM offices.



BLM uses appraisals to estimate the fair market value for land and mineral sales, leases, exchanges, rights-of-way, permits, and acquisitions.

Appraisal

Federal law and BLM regulations require that the government receive fair market value for the use or sale of public land or minerals. Fair market value determinations are also required by law before any land may be acquired by BLM. The BLM uses appraisals to estimate the fair market value for land and mineral sales, leases, exchanges, rights-of-way, permits, and acquisitions.

The sale or exchange of public lands is a means of conveying these lands to individuals, local agencies and communities, or the state government. These transactions benefit both parties and have been used to facilitate ranch management, community expansion, and industrial development and to add desirable inholdings to our national parks, national forests, and wildlife refuges.

Many routine appraisals such as linear rights-of-way and mineral material sales are now done with schedules. Schedules are annual appraisals that establish the value for various types of land uses occurring over a large area of the state. District and resource area personnel apply these values to the individual cases as they arise. This method has streamlined case processing and allows the appraisal staff to concentrate on the more complicated cases.

The appraisal staff has begun using the comparable sales approach for the valuation of competitive oil and gas leases. Staff appraisers work closely with fluids minerals staffs of the State Office and district offices to ensure that the government receives adequate bonus payments when leasing oil and gas rights. In addition, the appraisal staff helps with mining claim disputes by estimating the market value of various common minerals.

Cadastral Survey

Cadastral surveys are performed to create, mark, and define or to retrace the boundaries between adjoining lands, and more particularly between land of the federal government and private owners or local governments. The BLM is the only federal agency authorized to determine the boundaries of the public lands of the United States.

Nationwide surveyors are proudly celebrating the bicentennial of the cadastral survey system. On May 20, 1785, the Continental Congress passed an ordinance authorizing the establishment of a "...mode of locating and disposing of lands in the western territory. . ." The area that became the state of Ohio was the site of the experimental development of the rectangular system of surveying, an important transition from the prevalent practice during colonial times of using an irregular metes and bounds description that depended more or less on the description of neighboring areas.



The cadastral survey creates original boundary lines (in the standard township-range-section system), recovers those which have been lost, and prepares survey plats for a permanent record of land status. Survey authority extends to all public land as well as to other federally controlled land and lands of intermingled ownership.

Surveys were completed on about half the land in Wyoming by 1910. Many of the original wood and sandstone corner markers, some dating back to the 1870s, have been lost through deterioration, erosion, and other natural causes. Reestablishment of the old corners is made as exactly as possible to ensure continuation of established land ownership. Table 38 shows the accomplishments of the cadastral survey program to date.

Emphasis is now being placed on resurveying townships in the Powder River Basin to support mineral administration and development. Authorization has been received to open a field office in Gillette to accelerate completion of this resurvey.

Table 38
Cadastral Survey Accomplishments
on Wyoming Public Lands

	Miles Surveyed	Monuments Placed¹
Surveys Accomplished FY 85	647	1,322
Acceptable surveys accomplished to date (FY 85)	173,008	357,469
Surveys remaining to be done	191,582	391,653

NOTE: Mile and monument figures have been used in recent years as units for measuring workload and accomplishment. Acreage figures are much less descriptive of actual accomplishments than are mile and monument figures. For example, 640 acres would be reported whether only the exterior boundaries of a section were surveyed or the section was subdivided into 40-acre tracts.

¹ A monument is a marker set to identify a survey corner.

Engineering and Support Services

Access

The purpose of the access program is to provide legal access to public lands for management, protection, development, maintenance, and use of the resources. The BLM in Wyoming has an activity access program; 8 to 12 easements are acquired annually.

The BLM in Wyoming recently completed two activities to accommodate members of the public interested in hunting, fishing, and general recreation: the Platte River Resource Area in the Casper District cooperated with Natrona County to publish a public roads map indicating the names of landowners and the Rawlins District initiated a trial program to promote cooperation and respect between hunters and private landowners. During hunting season, the BLM provided courtesy patrols to roam areas of the district where hunters and landowners had had problems in the past. Information stations were opened in front of the BLM office in Rawlins and at the resource area office in Lander. BLM personnel provided answers to hunting and access questions.

The Rawlins District manages approximately 6.2 million acres of public land in south central Wyoming. Most of these lands are open for hunting during the seasons established by the Wyoming Game and Fish Department; however, these lands are also used for livestock grazing, oil and gas development, and various other purposes. Land ownership is intermingled among federal, state, and private interests, so visitors may become confused. Private landowners have the right to control access across private lands unless the road crossing their land is a public road.

While the program is a first in Wyoming, "Operation Respect" has already been proved successful by the BLM in New Mexico and Arizona.



The BLM Rawlins District initiated a trial program this year to promote cooperation and respect between hunters and private landowners.

Aerial Photography and Remote Sensing

Color infrared aerial photography provides a method for identifying, analyzing, and mapping vegetation, water, soils, geology, and cultural activities for various planning documents. Aerial photography interpretation is an efficient way to identify vegetative and soil types, geologic and topographic features, and water sites, as part of BLM's planning process. These types of inventories previously required on-the-ground inspections, but they are now done in the office.

Aviation

When commercial transportation is not available, the BLM charts small single and twin engine aircraft from services throughout Wyoming to provide economical commuter service. Chartered helicopters are used for minerals field investigation, range and soil inventories, wild horse capture, and fire suppression. Helicopters allow for the expedient movement of personnel and equipment to remote areas inaccessible by motor vehicle.

Engineering

Wyoming BLM's civil and agricultural engineers provide technical expertise to other resource disciplines. Major emphasis is on providing survey and design capability for road, bridge, recreation, building, water control structure, and range improvement construction and maintenance. The engineering staff provides technical advice and assistance on energy exploration and development plans submitted by industry. Increasing emphasis is placed on hazard reduction and public safety.

More than 7,200 miles of roadway are under BLM jurisdiction in Wyoming. About half of the roads are primary roads with some type of shaped surface and minimum drainage. The rest are secondary roads and generally are unimproved. Annual maintenance work covers more than 1,000 miles, as shown on table 39. The BLM also maintains or constructs 195 reservoirs and 22 well projects annually.

Table 39
BLM Road System
(cumulative)

District	Total Miles of Road in Transportation Plan	Miles of Road on Public Lands	1974 through 1985 Easements Acquired		Miles Maintained Annually ¹
			Number	Miles	
Worland	1,419	950	74	76	225
Rawlins	2,485	1,887	100	110	389
Rock Springs	1,351	1,042	64	51	350
Casper	1,963	705	52	36	51
TOTAL	7,218	4,584	290	273	1,037

NOTE: Some county roads are included because BLM is required to tie into federal or state road systems.

¹ Maintenance totals are for FY 85. BLM roads are normally maintained under a three-year cycle, or as needed.

Fire Management

The BLM is responsible for protecting property and natural resource values on the public land from wildfire, rehabilitating areas damaged by wildfire, and ensuring that "prescribed burning," which is designed to accomplish a variety of resource management objectives, is safely conducted and controlled.

Fire management and protection of public land in Wyoming is provided by BLM crews and equipment. Through a statewide cooperative agreement with the Forest Service, the state of Wyoming, and most counties in the state, all personnel and equipment are available on a reimbursable basis to any agency that needs them.

In the past, fire suppression was aimed at suppressing the fire at all costs. The degree of fire suppression practiced now is based on good planning, which considers the values of the resources to be protected. The program emphasis is placing fire management considerations into resource management plans, promotion of prescribed burning, and better coordination with other states. Table 40 contains statistics for fires that occurred on public land in Wyoming in 1985.

Sign Shop

The BLM's sign shop in Rawlins is the only facility of this type in the Bureau, and it constructs signs for BLM offices in all states. The Bureau sign program consists of installing signs on public lands to support administration, multiple use protection, and identification of the public lands and resources. Its objectives are to promote the safety and convenience of public land visitors and users, to inform and interpret the natural, constructed, and management features of the public lands; and to create and promote a public awareness of the Bureau's role in multiple use resource management.

BLM signs are constructed through the Bureau sign shop so that uniformity in shapes, materials, and appearance is ensured, as is uniformity in placement and maintenance of the signs. International symbols are used, and new signs reflect metric as well as English measurements. Modern, efficient standards and techniques are used to build signs "from scratch" at the sign shop. Approximately 6,000 signs are constructed each year.



Table 40
Fires on Public Land
Fiscal Year 85

District	Wildfires				Prescribed Burns	
	Human Caused	Lightning Caused	Total Fires	Acreage Burned	Number	Acreage Burned
Worland	10	14	24	616	3	805
Rawlins	11	29	40	2,660	1	15
Rock Springs	14	29	43	1,249	1	1,000
Casper	2	22	24	2,066	1	800
TOTAL	37	94	131	6,591	6	2,620

Table 41
Technographics Support Provided for BLM
Offices in Wyoming During Fiscal Year 85

	Worland	Rawlins	Rock Springs	Casper	State Office
Maps					
Plans/reports	98	305	27	34	0
Mineral	34	0	0	4	1
Miscellaneous	24	9	0	0	35
1/2" = 1 mile status					
Map Revisions	0	0	0	0	11
1:100,000 scale status					
Compilation	0	0	0	0	15
Illustrations					
Plans/reports	19	26	5	26	0
Slide graphics	0	0	12	0	63
Certificates/awards	0	0	0	0	105 ¹
Miscellaneous	11	27	0	0	34
Digitizing					
Plans/reports					
7 1/2" Quads	78	12	56	4	8
Themes	5	3	7	2	45
Engineering Drawings					
Contracts and easements	0	0	0	0	50

¹ Includes work accomplished for districts.

Technographics

The technographics staff of the Wyoming BLM provides specialized support through the preparation of cartographic, engineering drafting, illustrative, and digital graphics products. Drafting support is provided for all contract drawings and easement plats. All maps, charts, graphs, and illustrations needed for clarification of public presentations, reports, and publications are also provided by this staff.

BLM designs and produces its own maps in support of resource management activities. Two basic and one special map series are maintained for public sale—the land and mineral status maps at scales of 1:500,000 and 1:1,000,000 and the surface and subsurface mineral quads at scales of 1:100,000 and one half inch equals one mile. The special map series at a scale of 1:200,000 depicts specialized public land usage. All maps in these series are multi-colored and show current land ownership status.

Production methods have greatly expanded in the cartographic field during recent years through the development and use of the Geographic Information System (GIS). This computer-based data analysis and storage system is an effective, efficient tool for resource management within BLM. A statewide GIS-related data base and the acquisition of advanced computer graphics hardware and software has made possible the production of resource-related cartographic products for both planning efforts and document publication.

Table 41 lists the technographic support provided for BLM offices in Wyoming in fiscal year 1985.

Law Enforcement

The Federal Land Policy and Management Act provides for general law enforcement authority for BLM lands. Wyoming special agents now have citation authority in cases where violations carry a criminal penalty. Effective in May 1985, a U.S. District Judge established a collateral fine schedule to be used by the BLM for applicable sections of the Code of Federal Regulations.

The law enforcement staff of the BLM in Wyoming is responsible for all investigative actions of criminal activity or major violations of federal laws pertaining to the public land. This staff provides training on evidence protection, interviewing, and observation for BLM employees in Wyoming. BLM law enforcement personnel coordinate efforts with state and local law enforcement officials.

The law enforcement work in Wyoming usually involves crimes against property, wild horse killing and theft, mineral theft, trespass on public land, or oil and gas lease fraud.

Employee Achievements



Introduction

The Wyoming Bureau of Land Management is proud of its employees and their continuing accomplishments. Many employees have been recognized in the past year by professional societies and other organizations for their outstanding contributions. BLM would like to share these accomplishments with the public and congratulate our employees on another successful year.

Many employees received BLM's Special Achievement and Quality Step Increase awards. These awards were too numerous to list, but special thanks go to those employees who were recognized for their superior accomplishments.

Wyoming State Office

The late **Paul D. Leonard**, former associate state director for the Wyoming Bureau of Land Management, received the BLM's Meritorious Service Award in recognition of his outstanding contributions in the field of land and resource management. This is the second highest award available to a government employee. Paul unexpectedly passed away in late June after a short illness.

Robert Berg, forester, was presented with an award of merit by the Society of American Foresters in March 1985. The award was given in recognition of outstanding service in the forestry profession for his efforts in the activities of the Southeast Wyoming Chapter and promotion of the society in Wyoming.

Debbie Henson, supervisory personnel staffing specialist in the Division of Administration, was selected by the Governor's Committee for the Employment of the Handicapped to receive the Public Personnel Award for 1985. Debbie received this recognition and award for her efforts in placing handicapped individuals within the Wyoming BLM organization. This award was presented to her personally by Governor Ed Herschler at the Fourth Annual Governor's Conference on the Handicapped, which took place in Casper in October.

Gerald L. Jessen, chief, Branch of Engineering and Support Services, Division of Operations, received national recognition in 1985 when he received the Federal Engineer of the Year award from the Bureau of Land Management and the Department of the Interior. He was also honored locally in 1985 when he received the Federal Civil Servant of the Year award from the Cheyenne Federal Executive Council.

Roger Mertens, range conservationist, Division of Lands and Renewable Resources, was recognized by the Wyoming Society for Range Management. The Society awarded Mertens the Trail Boss Award at its annual meeting in November 1984. This award is presented to individuals who have made noteworthy or outstanding contributions to the art and science of range management.

Joanie Redfield, public affairs specialist, received first place in the Wyoming Press Women's Contest for a special edition of the *Wyoming Horizons* newsletter concerning the Taylor Grazing Act, and second place for an interview and story with a 50-year veteran of the BLM who began her career with the General Land Office in 1915. The special edition of the newsletter also placed second in the National Press Women's Contest. In addition, a statewide first place award was shared with **Pat Korp**, former chief, Office of Public Affairs, for the 1984 annual report, *BLM in Wyoming*. **Redfield** also won first and second places in BLM's photo contest in the black and white category of wildlife.

Jim Roseberry, former wildlife biologist in the Division of Lands and Renewable Resources, was awarded the "Professional Wildlifer of the Year" award by the Wyoming Chapter of the Wildlife Society. The award is given to a chapter member who goes beyond the call of duty in the professional wildlife field in Wyoming. Roseberry has since moved to the BLM Worland District as an environmental protection specialist.

Casper District

Whitney Bradley, assistant district manager for mineral resources, received a letter of commendation from the Petroleum Association of Wyoming for teaching a unit of petroleum geology to the annual Summer Petroleum Course for Educators.

Ed Coy, chief, Branch of Solid Minerals, and **Harv Gloe**, mining engineer, were commended by the Minerals Management Service for a field inspection of an operating coal mine. **Coy**, along with **Mike McCracken**, environmental scientist, also received a letter of commendation from Texas Energy Services, Inc., for exceptional quality and expediency in completing permitting for the company's coal exploration work.

Laura Cockerham, wildlife biologist, **Gene Dahlem**, wildlife biologist, and **Bruce Daughton**, range conservationist, all received special thanks from the director of the Wyoming State Science Fair for their assistance in judging fair projects at Casper College in the spring of 1985.

Tim Monroe, Casper District Manager, received a letter of thanks for his presentation to the annual meeting of the Petroleum Association of Wyoming concerning the BLM-FS Interchange and current oil and gas activities in Wyoming.

Ray Stroup, outdoor recreation planner in the Platte River Resource Area, received an honorary membership to the Central Wyoming Wildlife Federation for an informative presentation concerning access during the group's public lands meeting in August.

The employees of the Casper District and the Platte River Resource Area received the Booster Certificate for supporting Big Brothers and Big Sisters. The employees shared the Ice Fishing Derby with BB/BS during Casper's First Winter Festival. The two groups worked together to win the Grand Prize for the best entry in the Central Wyoming Fair and Rodeo parade. The \$500 cash prize went to BB/BS, while the Platte River Resource Area has the trophy and some good memories.

The Casper District Branch of Fluid Minerals received a letter of commendation from the Academy of Sciences, National Research Council, for technical briefings and support provided for known geological structure determinations.

The Platte River Resource Area received a letter of commendation from the Sohio Petroleum Company district manager for expeditious processing of an APD in July during the midst of an active fire season. The staff was still able to meet the company's needs before the expiration of the lease.

Rawlins District

Vernon Lovejoy, recreation planner, was elected president of the City of Rawlins Recreation Board, which operates the recreation program for the city of Rawlins. In addition, Lovejoy received an Honorable Mention in BLM's photo contest in the color category of mineral exploration and development.

Fred Stabler, district fisheries biologist, was invited by the University of Arizona in Tucson to present a paper to the First North American Riparian Conference. The subject of the paper was "Increasing Summer Flow in Small Streams through Management of Riparian Areas and Adjacent Vegetation: A Synthesis."

Larry Trapp, fire management officer, was promoted to captain in the Rawlins Volunteer Fire Department.

Rock Springs District

Dabney Eastham, seasonal biological technician, received the BLM's Exemplary Act Award for using the Heimlich maneuver to correct a potentially life-threatening situation when a coworker was choking on a bite of lunch. He learned the Heimlich maneuver when working as a student conservation association volunteer in BLM's Salem District in Oregon.

Tim Murphy, range conservationist in the Salt Wells Resource Area, was elected as the southwest councilman for the Wyoming Section, Society of Range Management.

Tony Tezak, station foreman for the firefighting crew, received the BLM's Exemplary Act Award and certificate of appreciation from the Forest Service Supervisor, Kootenai National Forest, Montana, for saving the life of a firefighter who had a severe allergic reaction to a bee sting. Tezak restored breathing, consciousness, and heart activity and treated the victim for shock.

Worland District

Gary Blincow, range conservationist, received a letter of commendation from the Society for Range Management for conducting the 1985 Wyoming state range judging contest at Worland and assisting with the instruction at the society's youth camp at Ten Sleep, Wyoming.

Jeff Denton, wildlife biologist, and **Brad Straubel**, temporary firefighter, both received Exemplary Act Awards from the BLM and certificates of appreciation from the Forest Supervisor, Kootenai National Forest, Montana, for administering emergency cardiopulmonary resuscitation to a firefighter who had an allergic reaction to a bee sting during a firefighting operation.

Mark Goeden, supervisory range conservationist, and **Jamie Sellar-Baker**, range technician, both received letters of commendation from the Society for Range Management for helping with the Wyoming state range judging contest in Worland.

Dick Kroger, fisheries biologist, was presented with the Wyoming Water Conservationist of the Year award by the Wyoming Wildlife Federation. The award was for his effort in organizing the citizens' instream flow initiative drive in Worland. Kroger served as the secretary-treasurer and president-elect of the Colorado/Wyoming chapter of the American Fisheries Society.

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